COST CONTROL

FOR

SCHOOL FOODSERVICES

Third Edition

by

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This manual has been edited for use in training people from different states. As a result of teaching the original *Cost Control Manual* several times, edits have been made in this version to improve the flow of information and to update data.

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COMMENTS

This manual is designed to assist the school foodservice director and the business manager in controlling costs and in operating a financially successful school foodservice program. It addresses financial reports needed, interpretation of the reports, and how to take corrective action when costs are higher than desirable.

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PREFACE

The main goal of this manual is to provide the person in charge of school foodservice (SFS) at the district level and the school level information needed to manage costs and maintain a financially successful program.

Today SFS is expected to run like a business and be self-supporting, especially since most school districts are experiencing tight budget years and it is less likely that SFS will be subsidized from school board (school district) funds.

In order for an SFS director to operate the SFS program like a business, it is essential for the director to know what the program's expenses and revenues are on a monthly basis and to know this soon after the month ends. The financial data must be accurate and kept on an accrual basis. Most school finance offices provide this data to the SFS director; however, it may not always be in a form the director desires or understands.

The lack of good SFS accounting data is a common problem, particularly among school districts that are losing money. Unfortunately, the SFS director may lack knowledge about accounting terms or not have an understanding of controlling costs.

This manual is organized in nine modules. There are exercises in the modules to be completed. Since the manual is technical in nature and contains a lot of information, it is desirable for the participants to read through it completely after going to class and maintain it as reference material. In order to complete some of the exercises in class, the participant may want to complete a pre-seminar questionnaire and bring to the seminar; a copy is in the Appendix.

This manual is intended to help one to:

- Understand cost management
- Set up controls
- Determine where the financial problems are
- Find ways of reducing food and labor costs
- Establish ways of increasing revenue
- Set up measurements of effectiveness

This second edition rearranges the order of subjects covered and adds illustrations, exercises, and updates the data. This manual has been taught over 200 times and the changes in the second edition are as a result of what the presenters have said would enhance the manual.

MODULE 1 INTRODUCTION TO COST CONTROL

CONTENTS

Introduction

Importance of Cost Control

Governmental Accounting System

Accrual Accounting System

Basic Accounting

OBJECTIVES OF MODULE 1

Participants will be able to:

- Understand what cost control means
- Understand the basic accounting terms
- Understand the differences between accrual accounting and cash accounting
- Understand the importance of accurate inventory

MODULE 1

INTRODUCTION

If a school foodservice (SFS) director is going to be held responsible for operating a self-supporting program, it is imperative that he or she understand finance and have the knowledge needed to manage finances. It requires more business skill today to operate SFS with the limited revenue available than it did in the 1970s. **Why is this true?**

Costs have increased at a greater rate than has revenue, and as a result, there is little room for error.

The federal reimbursements for school breakfast and lunch have increased on the average by between 3 and 4 percent annually from 1982 through 1990, with the prices charged students increasing often less than 3 percent annually. During the 1990s, the increases averaged between 1.8 and 2.5 percent annually. In 1999 and 2000, the paid student reimbursements were the same as in 1998. On the other hand, the cost of producing and serving a lunch has increased between 3 and 6 percent annually, with labor costs consuming the greatest percentage of the revenue.

Also, many school districts have experienced a decline in enrollment along with serving a more demanding and difficult-to-please student customer. This may have resulted in serving fewer customers. Often the labor hours have not been reduced as the number of customers has decreased and instead, work has expanded to fill the time available. In addition, equipment is getting older and is breaking more frequently.

Cost Control - Module 2

IMPORTANCE OF COST CONTROL

Cost control is one of the basic functions of management. Although management must be concerned with nutrition and food quality, controlling costs is basic to survival. Cost control requires management to use financial accounting reports for monitoring, evaluating, and correcting performance of the foodservice programs. Costs are the difference between the revenue and the bottom line (profit or loss):

Revenue - Costs = Profit or Loss

The <u>number one requirement</u> for cost control management is an accounting system that provides accurate and timely financial information and reports.

The <u>second requirement</u> is that the person in charge of SFS have enough basic accounting knowledge to understand the reports and information provided.

The <u>third requirement</u> is that the person in charge know how to put the information to use and how to take corrective action.

Learning to meet the latter two requirements is the purpose of this manual.

An **accounting system, or financial system**, is a set of interrelated reports that tell how well one is doing financially. In some school districts the financial reports are produced merely as a set of reports to be used by the finance office and the school board. However, the SFS director needs financial reports that can be used for determining success in meeting the SFS program goals and objectives by measuring and comparing:

- Financial balances
- Participation
- Productivity

It should be noted that other goals are to obtain high student satisfaction levels and meet the dietary guidelines. The financial reports **will not** measure the success in meeting the nutritional and educational goals of the program, nor if there is a high student satisfaction level. These too need to be measured.

Cost Control - Module 2

GOVERNMENTAL ACCOUNTING SYSTEM

A governmental accounting system, such as most public school districts use, is different from that used by the business world (profit-making enterprises). Though SFS is not a profit-making enterprise, it is a business enterprise. Therefore, the financial reports need to resemble those used in the business world more than those used for governmental accounting. Some of the differences in the two can be seen in Exhibit 1.1, which lists terms and reports and shows how they differ. Also, see Appendix B for a list of terms.

Exhibit 1.1. Basic Accounting Terms and Reports

GOVERNMENTAL ACCOUNTING TERM	USED WHEN FOOD SERVICES IS A BUSINESS	DEFINITIONS AS THEY RELATE TO SFS
Budgetary funds		Generally funds received from taxes, e.g., as funds received to operate a school district
Enterprise funds (Revolving Accounts)		Funds or payment received for services and product provided, e.g., SFS
Revenue	Revenue or income	Funds received or earned
Expenditure	Expense or cost	Funds spent—with an enterprise fund, e.g., SFS, it is the cost of labor, goods, and supplies used in the process of providing a service

Exhibit 1.1. (continued)

GOVERNMENTAL ACCOUNTING TERM (1)	USED WHEN FOOD SERVICES IS A BUSINESS (2)	DEFINITIONS AS THEY RELATE TO SFS (3)
Balance sheet	Balance sheet	Financial report that provides the financial posi-tion of the account at a point in time (as of that date)
Statement of income or income statement	Profit and loss statement	Financial report that shows what is left after all expenses are paid— profit or loss (-) over a period of time, e.g., month, year-to-date
Statement of change	Statement of change	Financial report that shows the changes since last accounting period ended
Cash accounting		Revenue recorded when received and expenses recorded in the period they are paid
Accrual accounting	Accrual accounting	System of accounting whereby revenue is recognized when it is earned (accounts receiv-able), value of inventory is recognized as an asset, and expenses are recog-nized when they are incurred

Exhibit 1.1. (continued)

GOVERNMENTAL ACCOUNTING TERM (1)	USED WHEN FOOD SERVICES IS A BUSINESS (2)	DEFINITIONS AS THEY RELATE TO SFS (3)
Encumbrances		Financial commitments, e.g., purchase order
Accounts Payable	Accounts payable or "unpaid bills"	Amount owed for goods and services received but not yet paid
Free and reduced- price meals		Meals served to students who qualify for free or reduced-price meals
Federal reimbursement or subsidy	Federal reimbursement or subsidy	Funds received by a school district's SFS at a preset amount when the meals served meet federal requirements
Value of United States Department of Agriculture (USDA) donated commodity	Value of United States Department of Agriculture (USDA) donated commodity	Value of donated foods provided to SFS under the National School Lunch Program (NSLP) considered a revenue
Entitlement commodities		Under federal law, specified amounts of commodities offered to school districts based on number of meals served to children under NSLP

The public school districts' educational programs are operating on tax revenue, not earned income. That revenue is usually a preset sum. The SFS programs' funding depends on the number of students served.

If the SFS program is expected to be self-supporting and to depend on revenue from the customer, it needs to be using an **enterprise system of accounting**. The governmental style of accounting will not provide to an SFS director the financial reports needed to manage without modification.

ACCRUAL ACCOUNTING SYSTEM

An accrual accounting system is one wherein accounts receivable, accounts payable, and food/supply inventory values provide a more complete picture of how the SFS is doing financially on a calendar-month basis. The financial accounting period for state reports is a month; therefore, the SFS account should be closed out at the **end of each month**. A comparison of an SFS account using the accrual system (with accounts receivable and payable and inventory values) with an SFS account without accruals (without accounts receivable and payable and inventory) is provided in Exhibit 1.2. There is a danger of becoming overconfident when the accruals are not included. Accrual accounting is explained more in detail in Module 1.2.

Exhibit 1.2 illustrates how the net profit is inflated if all accounts payable are not considered. In order to have an accurate picture of how the SFS program did in a month and year-to-date, all revenue earned and all expenses incurred must be considered. Also, the accounts receivable and inventory should be considered. It is important for the inventory to be accurate and for the same period as revenues and expenses.

Exhibit 1.2. School Foodservice Account—Comparison of Accounting Methods

	ACCRUAL AC	COUNTING	CASH ACCOUNTING		
	WITH ACCRUAL WITH INVENTORY		W/O ACCRUAL W/O INVENTORY		
REVENUES Pupil Lunches Breakfast Adult Lunches Kindergarten A La Carte Federal Reimbursement State Reimbursement Contracts Special Functions Miscellaneous Vending USDA Commodities TOTAL REVENUE	\$ 808.058 3,052 39,985 19,300 242,362 217,500 29,400 46,244 4,779 2,477 88,120 90,161 \$1,591,438	50.8% 0.2 2.5 1.2 15.2 13.7 1.9 0.3 0.2 5.5 5.6 100.0%	\$ 808,058 3,052 39,985 19,300 242,362 0 29,400 4,779 2,477 88,120 90,161 \$1,327,694	60.9% 0.2 3.0 1.5 18.3 0.0 2.2 0.0 0.4 0.2 6.6 6.7 100.0%	
EXPENSES COST OF GOODS SOLD BEGINNING INVENTORIES Food Paper & Supplies USDA SUBTOTAL	\$ 491,953 62,921 44,450 \$ 599,324		\$ 0 0 \$ 0		
PURCHASED & DONATED FOODS Food Paper & Supplies USDA SUBTOTAL	\$ 785,266 137,320 16,566 \$ 939,152		\$ 112,669 37,320 16,566 \$ 166,555		
LESS ENDING INVENTORIES Food Paper & Supplies USDA SUBTOTAL	\$ 641,629 119,422 48,566 \$ 809,617		\$ 0 0 0 \$ 0		
COST OF GOODS SOLD Food Paper & Supplies USDA TOTAL COST GOODS SOLD	\$ 635,590 80,819 12,450 \$ 728,859	39.9% 5.1 0.8 45.8%	\$ 112,669 37,320 16,566 \$ 166,555	8.5% 2.8 1.2 12.5%	
PAYROLL & FRINGE Salaries Fringe Benefits TOTAL PAYROLL & FRINGE BENEFITS	\$ 565,486 <u>201,360</u> \$ 766,846	35.5% 12.7 48.2%	\$ 441,894 164,279 \$ 606,173	33.3% 12.4 45.7%	
OPERATING EXPENSES Equipment Other Transfer to Operating TOTAL OPERATING EXPENSES	\$ 293 57,040 29,800 \$ 87,133	0.0% 3.6 1.9 5.5%	\$ 293 57,040 29,800 \$ 87,133	$0.0\% \\ 4.3 \\ \underline{2.2} \\ 6.5\%$	
TOTAL EXPENSES	\$1,582,838	99.5%	\$ 859,861	64.7%	
NET PROFIT (OR LOSS)	\$ 8,600	.5%	\$ 467,833	35.3%	

ACCRUALS: Food \$ 672,597 Contracts \$ 46,244
Paper \$ 100,000 Fed. Reimbursement \$ 217,500
Payroll \$ 123,592
Fringe Benefits \$ 37,081

Adapted from: Zupovitz, M., Presentation at Association of School Business Officials International Meeting in New Orleans, October 1991.

¹Indirect costs.

BASIC ACCOUNTING

Below is a basic accounting equation that is the underlying reason for some of the financial reports needed by the finance officer and SFS director.

Revenue - expense = net income/profit or net loss

Revenue is income in the form of cash and accounts receivable (funds owed for services already provided), including federal and state reimbursement.

Expense is costs in the form of bills paid and accounts payable (goods or services that have been received but for which payment has not been made).

Net income is revenue (profit) left over after all expenses are paid. When there are more expenses than revenue, it equals a loss, or net loss.

General ledger is a record of increases and decreases in an account. Often people erroneously think of debits and credits as meaning the reverse of what they mean in accounting.

Debit is entered on left-hand side of an account; an increase in assets and a decrease in liabilities. See Exhibit 1.3.

Credit is entered on right-hand side of an account; a decrease in assets and an increase in liabilities. See Exhibit 1.3.

Exhibit 1.3. What Makes Up a General Ledger Sheet

GENERAL LEDGER	
D.U.	
Debits	Credits
Assets	Liabilities
Increases in Revenue	Decreases in Revenue
Accounts Receivable	Accounts Payable

The following equation is another way of saying it:

Debit - Credit = Balance

Module 2 describes the basic accounting reports.

MODULE 2

FINANCIAL REPORTS

CONTENTS

Basic Financial Reports

Balance Sheet

Profit and Loss Statement

Percentage of Cost to Revenue

Analyzing a Profit and Loss Statement

Prorating Operating Costs

Allowable Fund Balance

Restrictions on Use of Funds

The Audit Trail

OBJECTIVES OF MODULE 2

Participants will be able to:

- Understand the basic financial reports
- Understand and analyze the profit and loss statement
- Identify the allowable fund balance
- Identify the restrictions on the use of funds
- Establish a good audit trail
- Understand how to obtain percentage of cost to revenue

MODULE 2

BASIC FINANCIAL REPORTS

An enterprise fund, such as the school foodservice (SFS) fund, has two basic accounting reports important to the SFS director. Those reports are:

- · A balance sheet
- A profit and loss statement

In some school divisions the finance office provides these statements to the SFS director but without any explanation. The SFS director may not understand them and, furthermore, the figures may be without accruals and inventory, which makes quite a difference (see Exhibit 1.2, Module 1). Accrual accounting is used in the business world and should be used with an enterprise fund within a school division, such as an SFS account.

The two important financial reports to an SFS director are a balance sheet and profit and loss statement.

BALANCE SHEET

The balance sheet is a "snapshot" of the fund's financial status as of a given day. This report is possibly considered more important to the finance officer than to the SFS director. However, if the SFS fund is incurring a deficit and the fund balance is being used, this becomes a more meaningful report. Also, when an overdraft of the account is a potential problem, the balance sheet becomes more meaningful. Three major categories on the balance sheet are:

- Assets
- Liabilities
- Balance

Assets - Liabilities = Balance

The content of a balance sheet for SFS is divided into the following categories:

ASSETS	LIABILITIES
Cash Accounts Receivable Inventory of Food and Supplies Prepaid Expenses Net Book Value ² of Large Equipment	Accounts Payable—Accruals Notes Payable Wages Payable Total Liabilities Fund Balance/Retained Earnings
Total Assets	Total Liabilities and Net Worth

Assets are shown on the left side of the balance sheet. Cash, which is the most liquid asset, is listed first. It includes petty cash on hand, money market accounts, and money in the bank drawing interest.

Accounts receivable should include any funds earned but not yet received. The most noteworthy for SFS are the federal reimbursement, which are for meals served from the beginning of the month. Sometimes these payments are three to six weeks behind. When a receivable is collected, cash increases and the receivable decreases by the same amount. Some accounts receivable are not collectible, e.g., returned checks and charged meals, and when this is known to be the case, these uncollectible accounts should be removed from accounts receivable.

Inventory of food and supplies should be an accurate accounting of food and supplies on hand that are usable.

Liabilities are obligations—wages payable, fringe benefits payable, and obligations to suppliers. Accounts payable to vendors/suppliers are generally recognized when an invoice or bill is received.

The wages payable are wages for those days which employees have worked but have not been paid.

Exhibit 2.1 shows a typical balance sheet for an SFS operation. The balance sheet usually compares current balances with the balances at the end of the prior year.

²The cost of equipment is recorded as an asset (less the accumulated depreciation, which leaves the net book value).

Exhibit 2.1. School Foodservice Balance Sheet

	1999	2000
(1)	(2)	(3)
ASSETS:	Φ 70 700	Φ < 4.200
Cash in Bank	\$ 70,500	\$ 64,200
Investments (e.g., certificates) Accounts Receivable:	10,540	10,720
Program Claims Reimbursements	2,020	1,005
State Matching Funds	12,010	13,035
Other (Catering, etc.)	12,010	13,033
other (catering, etc.)		
Total Cash and Funds:	\$ 95,070	\$ 88,960
INVENTORIES:		
Food Supplies	\$ 2,450	\$ 2,640
Paper/Disposables and	1,002	985
Detergents	,	
Total Inventory:	\$ 3,452	\$ 3,625
	·	·
TOTAL ASSETS:	\$ 98,522	\$ 92,585
I LADII PETEC I EUNID DAT ANCE.		
LIABILITIES and FUND BALANCE: Liabilities:		
Accounts Payable	\$ 4,780	\$ 4,500
Accrued Payroll	2,250	3,750
Accrued Health Insurance	940	1,050
Payable	7.10	1,000
Total Liabilities:	\$ 7,970	\$ 9,300
	, 1,5-1.2	, , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Fund Balance:	φ = -0.0	ф 00
Reserved (Encumbrances)	\$ 5,690	\$ 4,500
Inventories	3,452	3,625
Unappropriated	81,410	75,160
Total Fund Balance:	\$ 90,552	\$ 83,285
TOTAL LIADILITIES AND		
TOTAL LIABILITIES AND FUND BALANCE	\$ 98,522	\$ 92,585
TUND DALANCE	\$ 90,322	\$ 72,383

PROFIT AND LOSS STATEMENT

The profit and loss statement (P&L) is also known as an income statement and as a statement of operations. This is the most meaningful report for the SFS director. It presents an indication of how the SFS is doing financially during a period of time. The SFS director needs to see it as a monthly and year-to-date report. There are three major categories of the profit and loss statement:

- Revenues and gains
- Expenses and losses
- Net income/profit (or net loss) = difference in revenues and expenses

The contents of an SFS profit and loss statement are as follows:

REVENUE:

Cash income from customers at breakfast and lunch, for a la carte and other sales

Federal reimbursement

State subsidy

Income from catering and contracts

Interest received

Accounts receivable—federal reimbursement, rebates on commodities and

state matching funds

Value of USDA commodities received

EXPENSES or EXPENDITURES:

Food and supplies purchased and used during period

Food and supplies used from inventory

Value of USDA commodities used

Salaries and wages

Fringe benefits

Equipment purchased during period

Other costs (operating expenses)

Accounts Payable

NET INCOME/PROFIT or NET LOSS

A district-wide P&L statement (Exhibit 2.2) comes first and is of foremost importance to the director; however, the individual schools' P&L statements are needed by both the director and the SFS managers. The director can use the schools' P&L statements to determine where problems are.

Exhibit 2.2. Example of a School District Profit and Loss Statement

Exhibit 2.2. Exan	ipic of a c)CHOOL I	Jisti Ict I i	ont and	I LUSS DIA	ittilitiit				
	SEPT. 1999	%	OCT. 1999	%	NOV. 1999	%	DEC. 1999	%	YTD	%
REVENUE					<u> </u>					
Breakfast: Student Paid	\$ 4,681	.8%	\$ 4,975	.7%	\$ 6,364	1.0%	\$ 6,660	1.4%	\$ 22,680	.9
Student Reduced	430	.1	495	.1	506	.1	512	.1	1,943	.1
Federal Reimbursement	8,990	1.5	9,270	1.3	10,435	1.7	10,979	2.2	39,674	1.6
Lunch: Student Paid	117,318	19.9	186,975	26.2	148,653	24.3	119,644	24.6	572,590	23.8
Student Reduced	4,920	.8	5,270	.7	4,020	.7	3,927	.8	18,137	.8
Federal Reimbursement	284,474	48.2	310,983	43.5	244,884	40.0	193,509	39.7	1,033,850	43.0
State Reimbursement	14,300	2.4	14,300	2.0	14,300	2.3	14,300	2.9	57,200	2.4
Adult	19,233	3.3	25,720	3.6	32,206	5.3	19,400	3.9	96,559	4.0
A la Carte Sales	92,801	15.7	112,185	15.8	96,201	15.7	86,204	17.6	387,391	16.1
Special Functions	2,648	.4	4,110	.6	6,329	1.0	4,263	.9	17,350	.7
USDA Commodities	16,515	2.8	11,625	1.6	22,979	3.7	10,572	2.2	61,691	2.6
Contracts—Day Care	24,220	4.1	28,260	3.9	25,690	4.2	18,021	3.7	96,191	4.0
TOTAL REVENUE	\$590,530	100.0%	\$714,168	100.0%	\$612,567	100.0%	\$487,991	100.0%	\$2,405,256	100.0%
EXPENDITURES										
Labor Cost: Wages—School Based	\$165,159	27.9	\$186,398	26.1	\$172,131	28.1%	\$161,037	33.0%	\$684,725	28.5
Fringe Benefits	37,986	6.4	41,007	5.7	37,869	6.2	34,428	7.1	151,290	6.3
Salaries— Central Office	52,020	8.8	61,002	8.5	53,293	8.7	52,460	10.7	218,775	9.1
Fringe Benefits	12,625	2.2	15,250	2.1	13,323	2.2	12,005	2.5	53,203	2.2
	12,023	2.2	13,230	2.1	13,323	2.2	12,003	2.3	33,203	2.2
TOTAL LABOR COST	\$267,790	45.3%	\$303,657	42.4%	\$276,616	45.2%	\$259,930	53.3%	\$1,107,993	46.1%
Food Used: Purchased	\$170,072	28.8%	\$207,108	29.0%	\$180,094	29.4%	\$139,077	28.5	\$696,351	29.0
USDA	42,518	7.2	57,133	8.0	49,618	8.1	37,555	8.2	186,824	7.8
Paper & Supplies	29,526	5.0	39,279	5.5	34,308	5.6	24,887	5.1	128,000	5.2
TOTAL FOOD & SUPPLIES	\$242,116	41.0%	\$303,520	42.5%	\$264,020	43.1%	\$201,519	41.8%	\$883,303	42.0%
Equipment	\$ 16,000	2.7%	\$ 19,264	2.7%	\$ 17,800	2.9%	- 0 -		53,064	2.2
Overhead	17,715	3.0	27,852	3.9	26,400	4.3	25,400	5.2	97,367	4.0
Indirect Cost	23,621	4.0	29,995	4.2	25,040	4.1	22,040	4.5	100,696	4.2
TOTAL EXPENDITURES	\$567,242	96.0%	\$684,288	95.7%	\$609,876	99.6%	\$508,889	104.8%	\$2,242,423	98.5%
NET INCOME (OR LOSS)	\$ 23,288	4.0%	\$ 29,880	4.3%	\$ 2,691	.4%	(\$20,898)	(4.8%)	\$ 162,833	1.5%

It is important that the P&L statement be provided monthly, not quarterly or annually. How the SFS does financially is a criterion for judging an SFS director; therefore, when it is not provided by the finance office in some school districts, the SFS director may need to prepare his or her own profit and loss statement. In the larger school district, SFS may have its own accounting section headed by a cost accountant. No SFS director should take the responsibility for or be expected to take on the financial management of an SFS operation without being provided an accurate profit and loss statement monthly—and as soon as possible after the end of the month (within 25 days after the month closes). It is too late to take corrective action at the end of the year, and it is hard to re-create a problem that occurred three months earlier. The timeliness of the P&L statement is important in terms of its effectiveness as a management tool.

Other terms used when discussing a P&L statement are:

Gross margin (revenue during period less (-) cost of goods sold)

Less (-) sales tax (adult meals/sales, catering, and contracts with non-school functions may be taxed³)

Net income after taxes (profit [+] or loss [-])

If services are being provided by SFS on which sales tax is collected, then the taxes collected will show up as revenue and taxes paid out as an expense.

If a school district has a central kitchen or if a school is preparing food for other schools, it is suggested that each school be charged for the food it receives, as well as for labor costs to prepare food and costs of other supplies. In other words, treat each site receiving food as a cost center. Otherwise, financial problems will not be as easy to identify and correct.

It is important to the SFS director to have all accounts receivable and accounts payable included for the same period of time. An accurate inventory should be for what is on hand, and it is important that it be as of the same day that accounts payable are cut off. The reason that this date is so important is that the percentage of costs will be thrown off if not for the same period of time as the inventory.

It is desirable to see the profit or loss for the month and year to date. A spreadsheet should show the profit and loss by month and year to date. In addition to the dollar figures, the percentage of revenue spent for each expense category should be provided. A trend should be evident by the third or fourth month after school has begun. If the percentages are erratic, there should be an explanation—either (1) there is a "real" accounting error, (2) all accounts receivable and payable are not included, or (3) there is an error in inventory. It is important to learn what is causing the erratic figures and correct the problem.

Some expenses, particularly fringe benefits, may be charged annually. The estimated amount should be prorated over the months of the school year (when revenue is available). This estimate should be charged against each month's profit and loss—considered an accounts payable. In addition, utility and maintenance charges may be actually charged against SFS once or twice a year. However, the estimated amount should be prorated out as with the fringe benefits.

PERCENTAGE OF COSTS TO REVENUE

The two largest expense items in school foodservices (SFS) are labor and food costs. Together these costs should exceed no more than **85 percent of the revenue**. That leaves 15 percent of the revenue

³Check with state's tax policies.

to pay other costs. In some school districts labor and food costs cannot exceed 75 percent of the revenue because of other costs. If other costs are greater, labor and food costs must be less in order to break even.

To calculate the percentage of costs to revenue, use the following equation:

An example of converting dollars to percentages is provided in Exhibit 2.3:

If—

Revenue is \$500,000 per year,

Payroll is \$145,000, with fringe benefits \$39,500,

Purchased food is \$147,500, used USDA commodities \$27,000,

Disposables, supplies and detergents are \$16,500,

Central office salaries are \$49,000, with fringe benefits \$14,000,

Utilities are \$12,500, telephone is \$360, maintenance is \$12,500,

Small and large equipment is \$10,000,

Indirect cost is \$20,000

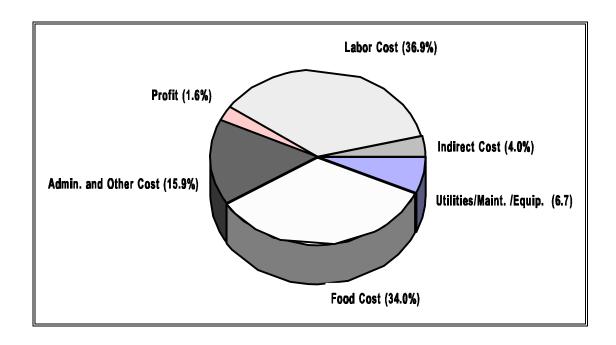
What are the percentages of cost to revenue?

Exhibit 2.3. Example of Percentages of Costs or Expenses to Revenue

REVENUE	TOTAL \$ 500,000	100%
EXPENSES	EXPLANATION	PERCENTAGE OF REVENUE
Labor Cost (including fringe benefits)	\$145,000 + \$39,500 = \$184,500 ÷ \$500,000	= 36.9%
Food Cost	\$147,500 + \$27,000 (commodities) = \$174,500 ÷ \$500,000	= 34.9
Other Cost	\$16,500 (disposables/supplies/detergents) ÷ \$500,000	= 3.3
Administrative Cost	\$49,000 + \$14,000 = \$63,000 (central office) ÷ \$500,000	= 12.6
Utilities/ Maintenance	\$12,500 + \$360 + \$12,500 = \$25,360 ÷ \$500,000	= 5.1
Equipment	\$10,000 ÷ \$500,000	= 2.0
Indirect Costs	\$20,000 ÷ \$500,000	= 4.0
TOTAL		98.8%

Exhibit 2.4. illustrates the relationship of the costs to what is available.

Exhibit 2.4. Graphic Example of Relationship of Costs to Revenue



Standards have not officially been set by United States Department of Agriculture or any other group. From the research done for the 1997 edition of this <u>Cost Control Manual</u> the following averages (shown in Exhibit 2.5) work in most parts of the country.

Exhibit 2.5. Guidelines for School Foodservice on How to Use Revenue

CATEGORY	PERCENTAGE OF REVENUE
Labor at School Level (including fringe benefits)	40%
Food (including paper supplies and detergents and USDA commodity value)	40%
Administrative Cost (central office salaries/fringe benefits)	7%
Direct Costs ⁴ (utilities, custodial services, maintenance)	6%
Indirect Costs ⁵	4%
Equipment, Large and Small	1%
Profit ⁶ or Loss	2%
TOTAL	100%

⁴Direct costs may be included in indirect costs but should not be double charged.

⁵Indirect costs may be based on an allowable percentage of the revenue or set by federal and state regulations.

⁶Profit is generally put back into the program for new equipment, etc.

Exercise:

Using Form 2.1, determine percent of expense to revenue for your school district (or school) last school year. Pull data from last year's totals.

Form 2.1. Percent of Expense to Revenue

Revenue <u>\$</u>	9
Labor Costs (Including Fringe Benefits) <u>\$</u>	9
Food Costs (Including Value of Commodities) <u>\$</u>	9
Paper Products and Supplies <u>\$</u>	9
Miscellaneous Cost (Telephone, Contracted Maintenance)\$	9
Direct Overhead (Central Office Costs, etc.)\$	9
Small and Large Equipment <u>\$</u>	9
Indirect Overhead (Amount Charged by School District)\$	9
SUBTOTAL\$	9
PROFIT (LOSS) <u>\$</u>	9
TOTAL\$	9

Completed Exercise:

The completed Form 2.2 shows the percent of expense to revenue for a school district for last school year.

Form 2.2. Completed Sample Percent of Expense to Revenue

Revenue	\$358,400	100.00_%
Labor Costs (Including Fringe Benefits)	\$138,440	<u>38.6</u> %
Food Costs (Including Value of Commodities)	<u>\$140,890</u>	<u>39.3</u> %
Paper Products and Supplies	\$ 27,860	<u>7.8</u> %
Miscellaneous Cost (Telephone, Contracted Maintenance)	\$ 3,200	%
Direct Overhead (Central Office Costs, etc.)	\$ 30,100	8.4 %
Small and Large Equipment	<u>\$ 7,000</u>	1.9 %
Indirect Overhead (Amount Charged by School District)	\$ 3,040	%
SUBTOTAL	\$350,500	<u>98</u> %
PROFIT (LOSS)	\$ 7,870	%
TOTAL	\$358,400	<u>100</u> %

Profit and loss statement by school or cost center is essential if a director is to manage the finances (Exhibits 2.6 and 2.7). An SFS director does not control finances alone. Generally SFS managers determine how much is purchased, wasted, and served (following some standardized procedures), when to bring in a substitute employee, etc. The manager and employees at each school must play a part in controlling costs, especially if costs need to be reduced.

EACH SCHOOL FOOD SERVICE \rightarrow A COST CENTER

If catering is a very large business, it should be treated as a cost center and have a monthly profit and loss statement. It is also wise to make a foodservice warehouse accountable, treating it as a cost center. This can be done by placing a delivery charge on each case (or item) delivered from the warehouse. The delivery charge can be arrived at by doing a cost analysis on operating the warehouse. The SFS director may wish to compare this cost with one or more efficiently run commercial warehouses. The delivery charge will become the revenue for the warehouse.

WAREHOUSE \rightarrow A COST CENTER

ANALYZING A PROFIT AND LOSS STATEMENT

A comparison of the P&L statement for the same month a year ago and month by month in the current year is very helpful. This makes it easy to spot problem areas, sudden changes, possible errors, etc. Exhibits 2.2, 2.6 and 2.7 show such a comparison.

QU	QUESTIONS					
	nen we compare the two schools in Exhibits 2.6 and 2.7, it is easier if we have used percentages. All reentages are arrived at by dividing the amount by the total revenue .					
1.	What do you note about food costs?					
2.	Is there a profit or loss?					
3.	Why would food costs be higher in September?					
4.	How much has the inventory changed?					
5.	Which school has the highest number of free and reduced?					
6.	What percentage of the total revenue comes from adult lunches?					
7.	Compare the percentages of costs with the guidelines for school foodservice. Which school has the highest food cost?					
	How much higher is it than recommended?					
8.	Note how much Jones Branch spent for food in September. List reasons why the costs may be greater in September at this school.					
9.	What other costs need to be decreased?					

Exhibit 2.6. Jones Branch High School Profit and Loss Statement, October 1999

	SEPT. 1999 (1)	% (2)	OCT. 1999 (3)	% (4)	1999-2000 YTD (5)	% (6)
REVENUE:						
Cash Student Lunch	\$13,760	47.0%	\$16,040	44.8%	\$29,800	45.9%
Reduced-Price Student Payment	56	0.2	64	0.2	120	0.2
Federal Reimbursement	1,752	6.0	2,161	6.0	3,857	5.9
USDA Commodities Received	1,240	4.2	1,494	4.2	2,734	4.2
A La Carte Sales	8,155	27.9	10,299	28.7	18,454	28.4
State Reimbursement	516	1.7	515	1.4	1,031	1.6
Adult Lunch	841	2.8	1,140	3.2	1,981	3.0
Other	2,870	10.0	4,127	11.5	6,997	10.8
TOTAL REVENUE:	\$29,134	100.0%	\$35,840	100.0%	\$64,974	100.0%
EXPENDITURES:						
Food Used (Purchased and Commodities)	\$13,893	47.6%	\$14,089	39.3%	\$27,982	43.1%
Paper Products and Supplies	1,955	6.7	1,890	5.3	3,845	5.9
Foodservice Employee Wages	10,104	34.6	9,549	26.6	19,653	30.2
Fringe Benefits	5,368	18.4	4,292	12.0	9,660	14.9
Maintenance/Telephone	266	0.9	220	0.6	486	0.7
Indirect	1,996	6.8	3,634	10.1	5,630	8.7
Overhead	676	2.3	676	1.9	1,352	2.1
TOTAL EXPENDITURES:	\$34,258	117.5%	\$34,350	95.8%	\$68,608	105.6%
PROFIT (LOSS)	(\$5,124)	17.5%	\$ 1,490	4.2%	(\$ 3,634)	(5.6%)

Exhibit 2.7. Washington Lee High School Profit and Loss Statement, October 1999

	SEPT. 1999 (1)	% (2)	OCT. 1999 (3)	% (4)	1999-2000 YTD (5)	% (6)
REVENUE:						
Cash Student Lunch	\$10,122	28.2%	\$11,985	29.3%	\$22,107	28.8%
Reduced-Price Student Payment	23	0.1	55	0.1	78	0.1
Federal Reimbursement	17,710	49.4	21,532	52.6	39,242	51.1
USDA Commodities Received	1,616	4.5	1,947	4.8	3,563	4.6
A la Carte Sales	2,418	6.7	3,173	7.7	5,591	7.3
State Reimbursement	671	1.8	672	1.6	1,343	1.7
Adult Lunch	1,865	5.2	119	0.3	1,984	2.6
Other	1,397	3.8	1,485	3.6	2,882	3.8
TOTAL REVENUE:	\$35,822	100.0%	\$40,968	100.0%	\$76,790	100.0%
EXPENDITURES:						
Food Used (Purchased and Commodities)	\$13,487	37.6%	\$16,695	40.8%	\$30,182	39.3%
Paper Products and Supplies	1,329	3.7	2,062	5.0	3,391	4.4
Foodservice Employee Wages	12,483	34.8	12,416	30.3	24,899	32.4
Fringe Benefits	4,068	11.3	3,470	8.5	7,538	9.8
Maintenance/Telephone	453	1.2	184	0.4	637	0.8
Indirect	2,602	7.2	4,989	12.2	7,591	9.9
Overhead	822	2.2	822	2.0	1,644	2.2
TOTAL EXPENDITURES:	\$35,244	98%	\$40,638	99.2%	\$75,882	98.8%
PROFIT (LOSS)	\$ 578	2%	\$ 330	0.8%	\$ 908	1.2%

Analyzing the different statements involves viewing them vertically and comparing them horizontally. Questions that one should answer when analyzing the P&L statement are:

- What percent of the total revenue does each line item constitute?
- What percent of the revenue is from breakfast?
- What percent of the revenue is from lunch?
- What percent of the revenue is from a la carte?
- What percent of the revenue from lunches is from elementary school students, middle school students, high school students, and adults?
- What percent of the revenue is from federal funds?

The expenditures on the P&L statement should be analyzed the same way. Similar type questions should be asked:

- What percent of the total revenue does each line of expenses constitute?
- What percent of the revenue is spent on food?
 Does this exceed 45 percent or the "norm" set?
- What percent of the revenue is spent on salaries/wages?
- What percent of the revenue is spent on fringe benefits?
- What percent of the revenue is spent on salaries/wages and fringe benefits?
- Does this exceed 40-45 percent or the "norm" set?
- What percent of the revenue is spent on cleaning supplies?
- What percent of the revenue is spent on disposable products?
- What percent of the revenue is spent on overhead or operating expenses?
- What percent of the labor costs (salaries/wages and fringe benefits) is spent on district-level staff (upper management)?

A frequent mistake that is made when analyzing the expenditures is that the percentages are of expenditures—not revenue. When this is done, the percentages may be in line but the revenue does not cover the expenses.

Comparing P&L statements for different schools of similar size and type will provide much insight as to where costs are out of line. Ratio analyses provide key indicators as to where problems are or when the costs are out of line.

PRORATING OPERATING COSTS

The cost of operating the central office should be prorated and charged monthly to each school (or each cost center). Each school's share of this cost should be prorated based on share (percentage) of the district's meal equivalents, as shown in Exhibit 2.8 or based on revenue. The meal equivalents are discussed in Module 4.

Exhibit 2.8. Example of Prorating Operating Cost to all Schools or Cost Centers in District

SCHOOL (1)	NUMBER MEAL EQUIVALENTS ⁷ FOR MONTH (2)	PERCENTAGE OF THE TOTAL MEAL EQUIVALENTS (3)	\$21,000 OVERHEAD PRORATED (4)
Jefferson Special Center	3,080	6%	\$ 1,260
Washington Elementary	5,608	10	2,100
Kennedy Elementary	7,010	13	2,730
Madison Elementary	6,894	13	2,730
Redford Middle	5,940	11	2,310
Berlin Middle	6,300	12	2,520
West End High	11,420	21	4,410
Brookfield High	7,400	14	2,940
TOTALS	53,652	100%	\$21,000

If the overhead costs or/and indirect costs are averaging \$21,000 a month, each school/cost center would pay their share. Exhibit 2.8 provides an example of how the overhead cost is prorated. See Form 2.3 for worksheet for prorating.

⁷The meal equivalent is based on one lunch equals one meal equivalent; \$3 in a la carte sales and 3 breakfasts equal one meal equivalent.

Form 2.3. Instructions for Prorating Overhead Costs

STEP ONE. Determine the total overhead costs by adding together such charges/costs as shown below:

- + Utilities, telephone
- + Central office staffs' salaries
- + Equipment, large
- + Repairs, maintenance
- + Computer hardware, software, supplies
- + Training and professional growth costs
- + Travel and vehicle maintenance
- + Other miscellaneous costs
- = Total Overhead Expenditures (Costs)

STEP TWO. Determine each school's meal equivalents.

To arrive at how much should be charged against each school, determine the meal equivalent, as follows:

MEAL EQUIVALENTS

Total Breakfasts Served (Divided by 3)	=	Meal Equivalents
Total Lunches Served	=	Meal Equivalents
Total A la Carte Items and Other Sales in Dollars (Divided by \$3)	=	Meal Equivalents
TOTAL EQUIVALENTS	=	Total Meal Equivalents ⁸

STEP THREE. Determine each school's share of overhead expenditures by adding together meal equivalents for each school and dividing each school's meal equivalents by the total meal equivalents, as illustrated below:

⁸Total meal equivalents are also used when determining staffing for a school.

Form 2.3. Instructions for Prorating Overhead Costs (continued)

	PRORATING OVERHEAD COSTS					
SCHOOL (1)	NUMBER MEAL EQUIVALENTS FOR MONTH (2)	"OVERHEAD FACTOR" PERCENT OF THE TOTAL (3)				
TOTAL MEAL EQUIVALENTS		100%				

The percentage becomes the overhead factor.

STEP FOUR. To determine each school's "Overhead Factor," determine what percent of the school district's overhead belongs to each school.

<u>Divide total meal equivalents for each school</u> = each school's "Overhead Factor" by total school district's meal equivalents

STEP FIVE. Multiply estimated overhead in dollars for school district by (x) "Overhead Factor" (convert % to decimals) = equals school's share of the total overhead cost.

STEP SIX. Determine day's overhead cost.

Divide a school's overhead cost for one year
by number of serving days = a school's daily overhead costs

STEP SEVEN. Determine overhead cost per lunch/meal equivalent.

Use the school's daily overhead when preparing profit and loss by school.

<u>Total overhead expenditures (costs)</u> = overhead cost per meal equivalent divide by total meal equivalents

This overhead costs should be used when costing out a lunch. One half of this amount should be used when costing out a breakfast and half of this amount for each dollar from a la carte/snacks sales.

ALLOWABLE FUND BALANCE

Federal regulations limit the school foodservice net cash resources to an amount that does not exceed **THREE** months average expenditures, except when major equipment purchases are planned. Check with your state director for interpretation of this policy. It is good management to keep a minimum balance of one month of operating costs. Since the federal reimbursement may not be received for three to six weeks after the close of month, a fund balance will be needed to meet payroll. To determine three months average expenditures, divide last year's expenditure by number of serving days and multiply by 60 days (3 months).

RESTRICTIONS ON USE OF FUNDS

Federal regulations require that if a school food authority (SFA) participates in the National School Lunch Program (NSLP) and receives federal funds, then the SFA shall maintain a nonprofit school foodservice. Revenues received by the nonprofit school foodservice are to be used only for the operation or improvement of such foodservice, except that, such revenues **shall not be used to purchase land or buildings, or to construct buildings,** unless otherwise approval by the Food and Nutrition Service, United States Department of Agriculture (FNS, USDA). USDA has defined and issued an interim rule that allows nonprofit foodservice revenues to be used for altering or improving school foodservice facilities. USDA's interpretation of the term "construction of buildings" is to allow the expansion of existing facilities but not the construction of new buildings. USDA may approve, on a case-by-case basis, the use of funds for expansion of existing foodservice facilities provide that (1) the project is needed to improve school foodservice operations; (2) in the case of a multi-purpose facility, school foodservice funds are used only to fund a proportionate share of the project based on anticipated use; and (3) the use of school foodservice funds for the project will not adversely impact upon ongoing foodservice operations.

The equipment, supplies, and food purchased with school foodservice funds must be for the school foodservice program use, i.e., a computer purchased with foodservice funds must be used by the school foodservice program, not for the principal's office or for other purposes.

THE AUDIT TRAIL

An audit trail that supports all financial records should be established. The objective is to be able to verify financial statements, purchases, and handling of revenue. There are many cross-checks that can be made in individual schools. These include checking:

 Food purchased and delivered against what was used and recorded on food production records

- Amount of food used compared with number of meals served
- Number of meal tickets issued to manager compared with number distributed
- Number of meal tickets sold with amount deposited listing checks received
- Number of students approved for free and reduced-price meals, number present, and number served

With the computerization present today, it is possible to make all of these checks thoroughly, accurately, and quickly. Otherwise, it is a tedious job done manually. The backup documents are used by Certified Public Accountants (CPAs) to audit a fund and can be used by the SFS director when theft is suspected.

All purchases should have the required source documents, to include (1) legal bid contract (if required by federal regulations and state law), (2) orders placed, (3) invoices, and (4) canceled checks. In the case of revenue, the bank statement is evidence that deposit was made.

Bank statements should be reconciled monthly with the deposit slips and the canceled checks. Banks do make mistakes and good backup procedures can prove the bank has made a mistake.

Audits of all school funds are generally required by the local school boards. An audit firm will usually perform an audit of the financial statements and the source documents. Accuracy of inventory may be checked, as well as other procedures.

Other audits or "reviews" that the SFS program can expect are those done by the State Department of Education and State Department of Agriculture. In addition, USDA staff from the Washington, D.C. office or the regional office and the General Accounting Office make audits of SFS, especially in large school districts, or where irregularities are suspected, e.g., over-claiming or theft of money or USDA commodities.

MODULE 3

DETERMINING REVENUE/INCOME

CONTENTS

Source of Revenue

Determining Revenue for Breakfast

Determining Revenue for Lunch

Determining Daily Revenue

Student Meal Prices

Adult Meal Prices

A la Carte Prices

OBJECTIVES OF MODULE 3

Participants will be able to:

- Determine revenue for breakfast by category
- Determine revenue for lunch by category
- Determine average revenue for meals served
- Determine average daily revenue
- Determine daily revenue
- Understand some of the factors to consider when setting the prices

MODULE 3

SOURCE OF REVENUE

All breakfasts and lunches served in compliance with federal and state regulations under the National School Lunch and Child Nutrition Programs qualify for federal subsidies or reimbursements and USDA donated commodities. Exhibits 3.1 and 3.2 show the federal reimbursements and USDA commodities and provide space for annual updating.

Exhibit 3.1. National School Breakfast Program Reimbursement

		FREE BREAKFAST		REDUCED-PRICE BREAKFAST	E
PERIODS (1)	PAID BREAKFAST (2)	REGULAR (3)	SEVERE NEED (4)	REGULAR (5)	SEVERE NEED (6)
7/88-6/89	\$.1400	\$.7925	\$.9475	\$.4925	\$.6475
7/89-6/90	\$.1750	\$.8600	\$1.0200	\$.5600	\$.7200
7/90-6/91	\$.1825	\$.8975	\$1.0675	\$.5975	\$.7975
7/91-6/92	\$.1850	\$.9275	\$1.1025	\$.6275	\$.8025
7/92-6/93	\$.1875	\$.9450	\$1.1225	\$.6450	\$.8225
7/93-6/94	\$.1900	\$.960	\$1.1425	\$.6600	\$.8425
7/94-6/95	\$.1925	\$.975	\$1.1600	\$.6750	\$.8600
7/95-6/96	\$.1950	\$.9975	\$1.1850	\$.6975	\$.8850
7/96-6/97	\$.1975	\$1.0175	\$1.2125	\$.7175	\$.9125
7/97-6/98	\$.2000	\$1.0450	\$1.2450	\$.7450	\$.9450
7/98-6/99	\$.2000	\$1.0725	\$1.2775	\$.7725	\$.9775
7/99-6/00	\$.2100	\$1.0900	\$1.3000	\$.7900	\$1.0000
7/00-6/01	\$.2100	\$1.1200	\$1.3300	\$.8200	\$1.0300
7/01-6/02					
7/02-6/03					

Source: U.S. Department of Agriculture, Annual Historical Review of FNS Program, Fiscal Year 1991 and Federal Register for other years.

Note: Commodities are not provided for breakfast.

Breakfasts served to children who qualify for free and reduced-price meals may qualify for additional subsidies. If a school served in the second preceding year more than 40 percent of the lunches free and at reduced prices, the school qualifies as "severe need" under the breakfast program and can receive additional subsidies for each breakfast served free and at reduced prices.

Lunches Served

Free/Reduced-Price

2nd Preceding Year

= 40 Percent or Higher

School

Severe Need''9

Breakfast

School

Exhibit 3.2. National School Lunch Program Reimbursement and Commodity Rate

PERIODS (1)	PAID LUNCH SECTION 4 (2)	FREE LUNCH SECTIONS 4 AND 11 (3)	REDUCED- PRICE LUNCH SECTIONS 4 AND 11 (4)	ENTITLEMENT COMMODITIES PER LUNCH (5)
7/88-6/89	\$.1400	\$1.4625	\$1.0625	\$.1225
7/89-6/90	\$.1475	\$1.5325	\$1.1325	\$.1325
7/90-6/91	\$.1550	\$1.6075	\$1.2075	\$.1400
7/91-6/92	\$.1600	\$1.6625	\$1.2625	\$.1400
7/92-6/93	\$.1625	\$1.6950	\$1.2950	\$.1400
7/93-6/94	\$.1650	\$1.7250	\$1.3250	\$.1400
7/94-6/95	\$.1700	\$1.7575	\$1.3575	\$.1450
7/95-6/96	\$.1725	\$1.7950	\$1.3950	\$.1425
7/96-6/97	\$.1775	\$1.8375	\$1.4375	\$.1450
7/97-6/98	\$.1800	\$1.8900	\$1.4900	\$.1500
7/98-6/99	\$.1800	\$1.9425	\$1.5425	\$.1475
7/99-6/00	\$.1900	\$1.9800	\$1.5800	\$.1475
7/00-6/01	\$.1900	\$2.0200	\$1.6200	
7/01-6/02				
7/02-6/03				

Source: U.S. Department of Agriculture, Annual Historical Review of FNS Program, Fiscal Year 1991 and Federal Register for other years.

⁹Check what your state calls these schools.

If a school district served in the second preceding year more than 60 percent of the lunches free or at reduced prices, the school district qualifies as a "Severe Need Lunch Program" and all meals are reimbursed at a higher rate (an additional two cents per lunch in 1997-98 school year).

Lunches Served
Free/Reduced-Price
2nd Preceding Year
= 60 Percent or Higher

Lunch School
District

DETERMINING REVENUE FOR BREAKFAST

Directors need to know how to arrive at income or revenue for breakfast. The total revenue includes income from student payment and reimbursements from federal, state, and local funds. Exhibit 3.3 below is an example based on the 2000-2001 school year's reimbursement rates.

Exhibit 3.3. Example of How to Determine Revenue for Breakfast

			FR	FREE		D-PRICE	
SOURCE (1)	ELEMENTARY PAYING STUDENT (2)	SECONDARY PAYING STUDENT (3)	Regular (4)	Severe Need (5)	Regular (6)	Severe Need (7)	ADULT (8)
Cash Sales	\$.75	\$.85	N/A	N/A	\$.30	\$.30	\$1.35
Federal Reimbursement	.21	.21	\$ 1.12	\$1.33	.82	1.03	-0-
Local Funds (Local Appropriations)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Matching Funds ¹¹	.02	.02	.02	.02	.02	.02	
TOTALS	\$.98	\$1.08	\$1.14	\$1.35	\$1.14	\$1.35	\$1.35

Exercise:

Using Form 3.1, determine the revenue for breakfast in your school district for this school year.

¹⁰Check what your state calls these schools.

¹¹Check your state for possible revenue.

Form 3.1. Determining Revenue Received for Breakfast

SOURCE (1)	ELEMENTARY PAYING BREAKFAST (2)	SECONDARY PAYING BREAKFAST (3)	FREE BREAKFAST (4)	REDUCED- PRICE BREAKFAST (5)	ADULT BREAKFAST (6)
Cash Sales					
Federal Reimbursement	\$.21	\$.21	\$ 1.12	\$.82	- 0 -
Local Funds (Local Appro- priations)					
State Matching Funds ¹²					
TOTALS					

Example: The meal is breakfast. If you serve 70 students free, 10 at reduced-price, 10 at paid prices, and 5 adults, and if revenue was what is shown in Exhibit 3.3 (for an elementary school), you would determine your average revenue as follows:

Exhibit 3.4. Example of Average Revenue for a Breakfast (Elementary)

CATEGORY (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=) REVENUE BY CATEGORY (4)		
Paid	10	\$.98	\$ 9.80		
Free	70	\$ 1.14	79.80		
Reduced-Price	10	\$ 1.14	11.40		
Adults	5	\$ 1.35	6.75		
TOTAL	95		\$107.75		
AVERAGE REVENUE	\$107.75 (Total Revenue) \div 95 (Number Served) = \$ 1.13 ¹³				

Exercise:

Using Forms 3.2 and/or 3.3, determine the average revenue for a breakfast using data from your school district on average numbers served and revenue by category from Form 3.1.

¹²Check your state for possible revenue.

 $^{^{13}}$ Don't round up revenue. It will show more revenue than you have.

Form 3.2. Average Revenue for a Breakfast-Elementary

CATEGORY (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=) REVENUE BY CATEGORY (4)
Paid			
Free			
Reduced-Price			
Adults			
TOTALS			
AVERAGE REVENUE FOR BREAKFAST	Total Revenue	by Category	_ ÷ Average Number Served Revenue for One Breakfast \$

Form 3.3. Average Revenue for a Breakfast-Secondary

CATEGORY (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=) REVENUE BY CATEGORY (4)
Paid			
Free			
Reduced-Price			
Adults			
TOTALS			
AVERAGE REVENUE FOR BREAKFAST	Total Revenue by	y Category = Average I	_ ÷ Average Number Served Revenue for One Breakfast \$

DETERMINING REVENUE FOR LUNCH

Directors particularly need to know how to arrive at income or revenue for a lunch. The total revenue includes income from student payment; reimbursements from federal, state, and local funds; and USDA commodities. Exhibit 3.5 below is an example based on the 2000-2001 school year's reimbursement rates. (See Exhibit 3.2 for rates.)

Exhibit 3.5. Example of How to Determine Revenue for Lunch

SOURCE (1)	ELEMENTARY PAYING LUNCH (2)	SECONDARY PAYING LUNCH (3)	FREE LUNCH (4)	REDUCED- PRICE LUNCH (5)	ADULT LUNCH (6)
------------	--------------------------------------	-------------------------------------	----------------------	-----------------------------------	-----------------------

Cash Sales	\$1.50	\$1.75	N/A	\$.40	\$2.25
Federal Reimbursement ¹	.19	.19	\$2.02	1.62	-0-
Entitlement Commodity Value ¹	.15	.15	.15	.15	N/A
State Matching Funds ²	N/A	N/A	N/A	N/A	N/A
Local Funds	N/A	N/A	N/A	N/A	N/A
TOTALS	\$1.84	\$2.09	\$2.17	\$2.17	\$2.25

Exercise:

Using Form 3.4, determine the revenue for lunch in your school district for this school year.

Form 3.4. Determining Revenue for Lunch

SOURCE (1)	ELEMENTARY PAYING LUNCH (2)	SECONDARY PAYING LUNCH (3)	FREE LUNCH (4)	REDUCED- PRICE LUNCH (5)	ADULT LUNCH (6)
Cash Sales	\$	\$	\$	\$	\$
Federal Reimbursement ¹⁴	.1900	.1900	2.02	1.62	- 0 -
Entitlement Commodity Value ¹					
State Matching Funds ¹⁵					
Local Funds					
TOTALS	\$	\$	\$	\$	\$

Example: If at lunch you served an average of 190 free, 18 reduced price and 215 paid and your revenue was that shown in Exhibit 3.5 for an elementary school, you would have the following average revenue: **Exhibit 3.6 Example of Average Revenue for a Lunch (Elementary)**

CATEGORY (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=) TOTAL REVENUE BY CATEGORY (4)
Paid	215	\$ 1.84	\$ 395.60
Free	190	\$ 2.17	412.30

¹⁴Reimbursement rates and the commodity rate for 1999-2000 was used. If a severe need district, the rate of reimbursement would be greater.

¹⁵Check your state for possible revenue.

Reduced-Price	18	\$ 2.17	39.06
Adults	20	\$ 2.25	45.00
TOTALS	443		\$ 891.96
AVERAGE REVENUE FOR A LUNCH	\$891.96 (Tota	l Revenue) ÷ 443 (N	Sumber Served) = $$2.01^{16}$

Using Forms 3.5 and/or 3.6, determine the average revenue for a lunch using data from your school district on number served and revenue by category from Form 3.4.

Form 3.5. Average Revenue for a Lunch-Elementary

CATEGORY SERVED (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=) TOTAL REVENUE BY CATEGORY (4)
Paid			
Free			
Reduced-Price			
Adults			
TOTALS			
AVERAGE REVENUE FOR A LUNCH	Total	Revenue = Av	Average Number Served erage Revenue for One Lunch \$

 $^{^{16}\}mbox{Don't}$ round up revenue. It will show more revenue than you have.

Form 3.6 Average Revenue for a Lunch-Secondary

CATEGORY SERVED (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=)TOTAL REVENUE BY CATEGORY (4)
Paid			
Free			
Reduced-Price			
Adults			
TOTALS			
AVERAGE REVENUE FOR A LUNCH	Total Revenue	by Category	Average Number Served erage Revenue for One Lunch \$

DETERMINING DAILY REVENUE

For an SFS director to obtain the average daily income, the revenue for a month may be divided by the number of serving days. It is a little more complicated to determine accurately the income for the day at each school. Exhibit 3.7 illustrates how to figure the income at a high school with a breakfast and lunch program. Using Form 3.7, determine the revenue for a day at Jones Branch High School.

If the SFS is running a deficit, it is suggested that the daily revenue and daily costs be determined at the school level. Teaching managers how to determine revenue for the day and expenses (costs) can enable managers to be accountable and take more active roles in reducing costs. The SFS director cannot control costs without the help of managers and staff employees. Managers and other employees need an awareness of costs and an understanding of how to reduce them (discussed in Modules 1, 5, and 7).

Exhibit 3.7. Determining Revenue for a Day (Date) <u>5/13/01</u>

SOURCE (1)	COUNT (2)	PRICE/RATE (3)	TOTAL (4)
BREAKFAST:			
Student Paid (Cash)	8	\$.80	\$ 6.40
Student Prepaid	1	.80	.80
Federal Reimbursement for Paid	9		
Reduced Paid (Cash)	5		
Reduced Prepaid	2		
Federal Reimbursement for Reduced	7		
Federal Reimbursement for Free	40		
Local Funds	N/A	N/A	N/A
Adult Paid	1	1.10	1.10
Adult Prepaid	N/A	N/A	N/A
A la Carte	10		5.20
SUBTOTAL			\$
LUNCH:			
Student Paid (Cash)	115	\$ 1.35	\$ 155.25
Student Prepaid	19	1.35	25.65
Federal Reimbursement for Paid	134		
Reduced Paid (Cash)	12	.40	4.80
Reduced Prepaid	2	.40	.80
Federal Reimbursement for Reduced	14		
Federal Reimbursement for Free	89		
State Matching Funds	237		
Local Funds	-0-	-0-	-0-
Value of Commodities Received	237	.15	
Adult Paid	14	2.00	28.00
Adult Prepaid	1	2.00	2.00
A la Carte	150		72.00
Other Income	(Coffee Service)		14.00
SUBTOTAL			\$
TOTAL INCOME			\$

¹Value of USDA Commodities may be included as a revenue at lunch based on quantity received. It would also be an expense based

on quantity of food used.

Exercise: Using Form 3.7 below, determine the revenue for a specific day.

SOURCE	COUNT (2)	PRICE/RATE (3)	TOTAL (4)
BREAKFAST:			
Student Paid (Cash)			
Student Prepaid			
Federal Reimbursement for Paid			
Reduced Paid (Cash)			
Reduced Prepaid			
Federal Reimbursement for Reduced			
Federal Reimbursement for Free			
Local Funds			
Adult Paid			
Adult Prepaid			
A la Carte			
SUBTOTAL			
LUNCH:			
Student Paid (Cash)			
Student Prepaid			
Federal Reimbursement for Paid			
Reduced Paid (Cash)			
Reduced Prepaid			
Federal Reimbursement for Reduced			
Federal Reimbursement for Free			
State Matching Funds			
Local Funds			
Value of Commodities Received			
Adult Paid			
Adult Prepaid			
A la Carte			
Other Income			
SUBTOTAL			

Exercise: HOMEWORK Using Form 3.7 below, determine the revenue for a specific day.

Form 3.7. Determining Revenue for a Day (Date)

SOURCE (1)	COUNT (2)	PRICE/RATE (3)	TOTAL (4)
BREAKFAST:			
Student Paid (Cash)	35	\$.75	
Student Prepaid	10	.75	
Federal Reimbursement for Paid	45	.21	
Reduced Paid (Cash)	3	.30	
Reduced Prepaid	1	.30	
Federal Reimbursement for Reduced	4	.82	
Federal Reimbursement for Free	125	1.12	
Local Funds	- 0 -		
Adult Paid	1	1.25	
Adult Prepaid	- 0 -		
A la Carte	- 0 -		
SUBTOTAL			
LUNCH:			
Student Paid (Cash)	350	1.50	
Student Prepaid	50	1.50	
Federal Reimbursement for Paid	400	.19	
Reduced Paid (Cash)	19	.40	
Reduced Prepaid	10	.40	
Federal Reimbursement for Reduced	29	.82	
Federal Reimbursement for Free	150	1.12	
State Matching Funds	- 0 -	- 0 -	
Local Funds	- 0 -	- 0 -	
Value of Commodities Received		10.68	10.68
Adult Paid	15	2.00	
Adult Prepaid	- 0 -		
A la Carte			
Other Income			
SUBTOTAL			
TOTAL INCOME			

STUDENT MEAL PRICES

The objective in setting student meal prices usually is to keep the reimbursable student breakfasts and lunches priced as low as possible. Many school districts price these meals below cost and make up the difference with revenue earned from a la carte sales, catering, and local funds.

The prices charged by SFS are often a political issue and require school board approval. Unfortunately, many people do not understand the financing of SFS and do not realize that the costs involved are much like those paid by commercial restaurants. See Module 9 which discusses increasing prices.

ADULT MEAL PRICES

Revenue from the National School Lunch and Breakfast Programs cannot be used to subsidize adult meals. If the school district decides to subsidize adult meals, the subsidy should be identified as an additional employee benefit and as a source of revenue in the SFS budget.

Check with your state regarding regulations on what the adult must be charged. It is usually the higher of one of the following:

 Actual cost of producing and serving the meal, including the value of USDA donated commodities

OR

 Highest charge to students plus state and federal reimbursements for paid meals plus USDA donated commodity value.

Prices are based on the same portion sizes as served students; larger portions should be costed and prices set accordingly.

A LA CARTE PRICES

The prices charged for a la carte items should be carefully established to ensure that these foods are not in competition with the breakfast or lunch programs. Usually the price is set to yield a profit, which goes to subsidize the breakfast and/or lunch prices. The same factors as are listed for setting meal prices should be considered when determining the prices to be charged (see Module 10).

MODULE 4

DETERMINING EXPENSES —LABOR COSTS

CONTENTS

Determining Expenses—Labor Costs

Productivity Rates or Meals per Labor Hour (MPLH)

Determining Meal Equivalents

Staffing Standards for On-Site Production

Staffing Satellite/Centralized Sites

Determining Labor Costs

District-Level Staff and Costs

OBJECTIVES OF MODULE 4

Participants will be able to:

- Determine productivity rate/meals per labor hour (MPLH)
- Determine meal equivalents
- Compare staffing costs of on-site production with satellite and finishing kitchen concepts
- Determine labor costs
- Use the staffing guides as reference of comparison when evaluating school district's staffing

MODULE 4

DETERMINING EXPENSES—LABOR COSTS

The two largest expenses in school foodservices are food and labor. Labor costs will be discussed in this module.

Labor costs, including fringe benefits, should be kept under 50 percent of the revenue in order to have sufficient revenue to spend on food and other expenses and at the same time break even. School districts often pay foodservice employees higher wages with much better benefits than their counterparts in the commercial food industry (see Exhibit 4.1). In an SFS operation, as the hourly rates paid increases above the competition (in the commercial food industry), the labor force needs to be more productive.

Exhibit 4.1. Hourly Wage Survey of United States' Commercial Industries Compared with Local SFS Wages

TYPE OF HOURLY EMPLOYEE (1)	COMMERCIA L LOWEST HOURLY WAGES (3)	COMMERCIA L HIGHEST HOURLY WAGES (4)	YOUR LOWEST HOURLY WAGES (5)	YOUR HIGHEST HOURLY WAGES (6)
Staff Employee or General Worker				
Crew Supervisor or Manager				

Does the commercial foodservice provide health insurance for the staff employee? For the manager? Is there a retirement plan? Does commercial company pay into the retirement fund for the employee?

Exercise:

Using Exhibit 4.1, insert wages being paid in your community by three to four commercial restaurants and then insert what school district pays. Make a comparison of commercial with your school district's highest wages. Most commercial foodservice employee fringe benefits are limited to social security and worker's compensation, whereas school districts may have other benefits.

PRODUCTIVITY RATES OR MEALS PER LABOR HOUR (MPLH)

Productivity rates used in the foodservice industry are measured in many different ways; however, the most common means used in SFS are numbers of meal equivalents per labor hour. Productivity rate is the output calculated in number of meal equivalents served. Productivity rate, or MPLH, can be calculated by dividing the number of meal equivalents produced and served in a day by the number of labor hours, as shown in the following formula:

Number of Meals and Service (Output) = Productivity Rate or **Number of Labor Hours (Input)**

Meals Per Labor Hour (MPLH)

Factors that affect the number of labor hours needed are shown in Exhibit 4.2. Productivity should be improving yearly.

Exhibit 4.2. Factors Affecting Labor Hours

Factors that affect productivity rate or meals per labor hour (MPLH) are:

- Type of food production system (on-site production, bulk satellite, pre-plated satellite, assembly-serve, etc.)
- Level of service (self-service, vending machines, plates served on serving line, made-to-order service)
- Menu (number of choices, difficulty or complexity)
- Degree of prepared foods purchased (raw ingredients, some convenience foods or all convenience foods)
- Type of equipment (amount of automation or lack of)
- Layout and design of kitchen and serving area
- Production planning (work schedules)
- Staffing and scheduling
- Training and skill levels of employees
- Motivation of employees
- Size of facility (number of customers, volume of sales)
- Schedule of serving periods

See Module 5 for ways to increase the productivity rate or MPLH.

DETERMINING MEAL EQUIVALENTS

Since in SFS the lunch is the most common denominator, it is the standard equivalent used frequently for comparing all other services. To create your own equivalency, determine how much labor (time) is involved in preparing and/or selling one dollar's worth of a la carte; and how much time it takes to prepare one breakfast and one lunch to come up with an equivalency rate. Use your efficient schools to evaluate time required.

The following equivalency rates in Exhibit 4.3 are used by several states. They are based on using some convenience foods and doing some preparation to provide the a la carte foods and breakfast foods.

Exhibit 4.3. Guidelines for Converting Breakfast, Lunch, and A la Carte Sales to Meal Equivalents

Meal Equivalents:

Lunch Meal—1 = 1 Meal Equivalent

A la Carte Dollars—\$3.00 = 1 Meal Equivalent

Breakfast Meals— 3 Breakfasts = 1 Meal Equivalent

Check to see if your state has an equivalency rate you are to use that differs from this.

STAFFING STANDARDS FOR ON-SITE PRODUCTION

As automation of preparing and serving food and use of prepared foods are increased, the staffing standards should be changed to reflect an increase in productivity. Frequently the automation and prepared or convenience foods are added one at a time (or slowly)—and the labor is not reduced. Unnoticed, the work will expand to fill the time available. Consequently, in a short time the staff will argue that it is not possible to do the work with less labor hours.

The staffing guidelines in Exhibit 4.4 provide for on-site production and use the average automated equipment that was common in the late 1980s, 1990s, and early 2000s.

Exhibit 4.4. Sample Staffing Guidelines for On-Site Production

	Meals Per Labor Hour (MPLH) for Low and High Productivity		Productivity	
	Conventional N	System ² MPLH	Convenience S MPL	*
Number of Meal Equivalents ¹	Low	High	Low	High
Up to 100	8	10	10	12
101-150	9	11	11	13
151-200	10-11	12	12	14
202-250	12	14	14	15

ii				
251-300	13	15	15	16
301-400	14	16	16	18
401-500	14	17	18	19
501-600	15	17	18	19
601-700	16	18	19	20
701-800	17	19	20	22
801-900	18	20	21	23
901 up	19	21	22	23

¹Meal equivalents include breakfast and a la carte sales. Three breakfasts equate to one lunch. A la carte sales of \$3 equate to one lunch.

Adapted from: Pannell-Martin, School Foodservice Management for the 21st Century, in TEAM Associates, Incorporated, 2000.

Any school foodservice staff with higher productivity than this chart should be congratulated and continue to increase their productivity.

²Conventional system is preparation of some foods from raw ingredients on premises (using some bakery breads and prepared pizza and washing dishes).

³Convenience system is using maximum amount of processed foods (for example, using all bakery breads, prefried chicken, and preportioned condiments and washing only trays or using disposable dinnerware).

Exercise:

To use the guidelines, determine the meal equivalents based on average numbers. Then decide if the preparation done could be classified as "conventional" or "convenience." Divide the number of meal equivalents (column 1) by the meals per labor hour (MPLH) recommended in column 2 or 3 to determine the number of labor hours justified.

Using Form 4.1, Step 1, determine the meal equivalents (MEQ); Step 2, divide MEQ by labor hours you have assigned to school for foodservices (including manager and cashier hours). This will provide the existing productivity rate of staff. In Step 3, determine number of hours the school justifies using staffing guidelines in Exhibit 4.4.

Using Form 4.1., Step 4, determine how many hours overstaffed (or understaffed) you are. See Exhibit 4.9 and complete Form 4.4 for average cost of a labor hour. With this information, determine how much the overstaffing is costing per day **or** the understaffing is saving per day. Multiply by number of serving days to determine cost for year.

Form 4.1. Comparison of Staffing to Guidelines

1.	DETERMINE MEAL EQUIVALENTS (MEQ)		
	Average Daily Number Breakfasts Served ÷ 3 (Include all student and adult breakfasts)	= <u>MEQ</u> (a.1)	
	Average Daily Number Lunches Served ÷ 1 (Include all student and adult lunches)	= <u>MEQ</u> (a.2)	
	Average Daily \$'s in A la Carte Sales ÷ \$3 (Catering and other sales may be included)	=MEQ	
		TOTAL MEQ (a.4)	
2.	DETERMINE YOUR PRODUCTIVITY RATE		
	Total MEQ ÷ (a.4) No. Labor Hours ¹⁷ At Your School (b.1)	= MPLH Your Staff's Productivity (b.2)	
3.	TO DETERMINE HOW YOU SHOULD BE STANGUIDELINES:	FFED ACCORDING TO	
	Total MEQ ÷	=	
	(a.4) MPLH from Guidelines (c.1)	No. Labor Hours (c.2)	
4.	DOES YOUR STAFF HAVE HIGH OR LOW PRO (To be completed after exercise with Form 4.4 has be		
	How many hours over the guidelines at the school? (d.1)		
	What is the difference between figure in b.1 and c.2? If b.1 has more hours than c.2, the school has very low productivity.		

¹⁷Manager's hours should be included in the totals.

STAFFING SATELLITE/CENTRALIZED SITES

In most instances, satellite schools that receive their food in bulk for portioning up on site, schools that receive cooked/chilled food or cooked/frozen food for finishing off, and schools that receive pre-plated meals ready to heat and serve or ready to serve will have better productivity than those preparing food on site. The size of the operations will make a difference. Some staffing guidelines are in Exhibits 4.5 and 4.6 for different satelliting systems.

Definition of some terms used in Exhibits 4.5 and 4.6 is as follows:

<u>Bulk Cold</u>—food cooked, chilled or frozen (e.g., cook-chill system) and transported for finishing off in the receiving (finishing) school.

<u>Bulk Hot</u>—food cooked and maintained hot through transporting and serving at the receiving (serving) school.

<u>Pre-Plated Cold (Bag)</u>—food prepared and bagged or pre-plated ready for distributing at the receiving (serving) school.

<u>Pre-Plated Frozen</u>—food prepared and portioned and transported ready for heating for service.

<u>Pre-Plated Hot</u>—food prepared, portioned, and transported on the day of service, hot, ready-to-eat.

Increased productivity rate or MPLH and reduced labor costs will be realized when the volume prepared at a location is great enough and when the specialized staff have been reduced (e.g., bakers, cooks, and managers) as shown in Exhibit 4.5. Satelliting one school from another school may not produce sufficient volume to result in a savings.

If one school is preparing food for only one to three other schools, the total meal equivalents may be used with the staffing guidelines from Exhibit 4.4. The hours will need to be divided among the schools at the times needed.

On-site production requires the most labor and has a lower productivity level than efficient satellite systems. As labor costs increase, ways must be found to eliminate the number of labor hours needed to do the job. Many school districts are examining the many different systems of delivering food and reducing labor hours. Exhibit 4.7 shows the desired productivity rate at an on-site production kitchen producing 350 lunches. Exhibit 4.8 shows a finishing kitchen serving 350 lunches. (A finishing kitchen is one that receives all food "prepped," or pre-prepared, ready for heating and serving.) Forms 4.2 and 4.3 are provided for exercises on staffing schools.

Exhibit 4.5. Staffing Guidelines for Production of Food for More Than One School

	MPLH AND NUMBER LABOR HOURS BY TYPE PREPARATION SYSTEM ¹⁸				
NUMBER OF MEAL	BULK COLD ¹⁹	BULK HOT	PRE-PLATED COLD (BAG) ²⁰	PRE-PLATED FROZEN ^{2,3}	PRE-PLATED HOT ³
EQUIVALENT (1)	MPLH (2)	MPLH (3)	MPLH (4)	MPLH (5)	MPLH (6)
200—500	25	27	21	22	20
501—1,000	30	30	30	37	40
1,001—2,000	50	45	50	55	60
2,001—3,000	65+	60	100	120	130
3,001—5,000	75+	70	110	120	130
5,001—10,000	130+	120	120	135	150
10,001—20,000	160+	130	130	135	150
20,000—30,000	175+	160	150	150	160
30,001 up	195+	175	150	175	190

Exhibit 4.6. Staffing Guidelines for Satellite Schools and Finishing Kitchens

	MPLH AND NUMBER LABOR HOURS BY TYPE PREPARATION SYSTEM				
	BULK COLD ²¹	BULK HOT ⁴	PRE-PLATED	PRE-PLATED	PRE-PLATED
NUMBER OF	(FK)	(FK)	COLD (BAG)	FROZEN 22	НОТ
MEAL					
EQUIVALENT	MPLH	MPLH	MPLH	MPLH	MPLH
Up to 75	16	17	75	30	50
76—100	18	19	75	30	50
101—200	20	21	100	50	75
201—300	22	24	100	60	75
301—400	26	26	100	60	75
401—500	26	28	100	60	75
501—700	28	30	100	60	75
701 up	30	32	100	60	75

 $^{^{18}}$ Transporting of food should be figured. The amount of time will depend on the number of stops, distance, number, and type menus; however, the cost of delivering should be included in total cost.

¹⁹Requires heating on site of service.

 $^{^{20}\}mbox{Highly}$ automated when over 2,000 food items are prepared.

²¹Choice menus and offer versus served.

²²Needs heating.

Exhibit 4.7. Staffing for an Elementary School with On-Site Production, Convenience System

Number Serving	
40 Breakfasts	
Staffed at	
Labor Hours23 Labor Hours	
Manager	
Staff Employee (bakes, salads, serve)	7 Hours
Staff Employee (cooks, backs line)	5 Hours
Staff Employee (cashiers)	5 Hours
Staff Employee (wash dishes)	3 Hours
TOTAL LABOR HOURS	3 Hours
	23 Hours

Note: If 23 hours @ \$10.50 (including fringe benefits), labor costs are \$241.50, divided by meal equivalents or 65.8¢ per lunch or per meal equivalent.

If 23 hours @ \$13.88 (including fringe benefits), labor costs are \$319.24, divided by meal equivalents or 87¢ per lunch or per meal equivalent.

Exhibit 4.8. Staffing for an Elementary School with a Finishing Kitchen Receiving Bulk Cold

Number Serving	350 Lunches
	40 Breakfasts
Staffed at	6 Meals per Labor Hour
Labor Hours	14 Labor Hours
Manager	6 Hours
	(Breakfast)*
Staff Employee (serves and prepares to serve)	5 Hours
Staff Employee (cashier)	3 Hours
TOTAL LABOR HOURS	14 Hours

Note: If 14 hours @ \$10.50 (including fringe benefits), labor costs are \$147.00, or 40.2¢ per lunch at finishing kitchen plus labor cost at production kitchen (10.1¢lunch²³). If 14 hours @ \$13.88 (including fringe benefits), labor costs are \$194.32, or 53.1¢ per lunch at finishing kitchen plus labor cost at production kitchen (10.1¢lunch¹).

*Manager serves breakfast.

²³Note the savings may not be great, but when multiplying by large number of meals served and for 180 days it becomes a worthwhile savings.

Exercise:

Using Exhibits 4.4, 4.5 and 4.6, Staffing Guides, Form 4.2, and an average wage of \$13.88 per hour (including fringe benefits), determine how the following schools would be staffed and the cost.

- Johnson High school serving an average daily lunch participation of 700 and 75 breakfasts, and sells \$525 in a la carte using a convenience system with low productivity?
- Robert Frost Elementary production school serving an average daily lunch participation of 500 and 100 breakfasts, and sells \$80 in a la carte using a conventional system with high productivity?
- Benjamin Franklin Elementary, a satellite receiving food in bulk (hot), serving an average daily participation of 200 for breakfast and 350 for lunch and compared to a conventional system with low productivity.

School Number Lunches Number Breakfasts Equivalent A la Carte Equivalent	Staff at Meals per Labor Hour Staff with Labor Hours
Total Equivalent Meals	Cost of Labor per Day \$ Cost of Labor per Lunch \$
School	Staff at Made
Number Lunches	Staff at Meals per Labor Hour
Number Breakfasts Equivalent	Staff withLabor Hours
A la Carte Equivalent	Labor Hours
Total Equivalent Meals	Cost of Labor per Day \$ Cost of Labor per Lunch \$
	1
Conventional School	Staff at Meals per Labor Hour
Number Lunches	
Number Breakfasts Equivalent	Staff withLabor Hours
A la Carte Equivalent Total Equivalent Meals	Cost of Labor per Day
Total Equivalent Means	Cost of Labor per Day \$ Cost of Labor per Lunch \$
Satellite School	Staff at Meals per Labor Hour
Number Lunches	
Number Breakfasts Equivalent	Staff with Labor Hours
A la Carte Equivalent	Lacot Hours
Total Equivalent Meals	Cost of Labor per Day \$ Cost of Labor per Lunch \$
Central Production Kitchen	Cost of Labor per Lunch Total Cost of Labor per Lunch \$

Labor Cost

School Johnson Number Lunches 700	Staff at 22 Meals Per Labor Hour
Number Breakfasts Equivalent25 A la Carte Equivalent175 Total Equivalent Meals900	Staff with 40.9 x \$ 13.88 Per Hour Cost of Labor per Day Cost of Labor per Lunch \$.631
	· ——
School Frost	Staff at Meals Per Labor Hour
Number Lunches 500	Per Labor Hour
Number Breakfasts Equivalent 33.3	Staff with 37.3 x \$ 13.88 Per Hour
A la Carte Equivalent <u>26.7</u>	Labor Hours Per Hour
Total Equivalent Meals	Cost of Labor per Day \$ 517.72 Cost of Labor per Lunch \$.925
	Cost of Labor per Lunch \$.925
Conventional School Franklin	Staff at <u>14</u> Meals Per Labor Hour
Number Lunches 350	Per Labor Hour
Number Breakfasts Equivalent <u>66.67</u>	Staff with 29.8 x \$ 13.88 Per Hour
A la Carte Equivalent	Labor Hours Per Hour
Total Equivalent Meals 416.67	Cost of Labor per Day \$ 413.62 Cost of Labor per Lunch \$.993
	Cost of Labor per Lunch \$.993
Satellite School Franklin	Staff at 28 Meals
Number Lunches 350	Per Labor Hour
Number Breakfasts Equivalent <u>66.7</u>	Staff with 15 x \$ 13.88 Per Hour
A la Carte Equivalent	Labor Hours Per Hour
Total Equivalent Meals <u>416.67</u>	Cost of Labor per Day \$ 208.20
Central Production Kitchen 416.67 ÷ 45 = 9.26 Labor Hours \$128.53 ÷ 416.67 = \$.308	Cost of Labor per Lunch Cost of Labor per Lunch Total Cost of Labor per Lunch S .500 S .308 Total Cost of Labor per Lunch S .808

Form 4.4. Staffing Schools

SCHOOL (a)	TYPE SYSTEM (b)	AVERAGE NUMBER LUNCHES SERVED /DAY (c)	AVERAGE NUMBER BREAK- FASTS SERVED /DAY (d)	AVERAGE REVENUE FROM A LA CARTE/ OTHER SALES (e)	TOTAL MEAL EQUIV- ALENTS (f)	MPLH (g)	NUMBER LABOR HOURS (h)
TOTALS							

(f) TOTAL MEAL EQUIVALENT ÷	(h) NUMBER LABOR HOURS =	AVERAGE MPLH

Average Lunches (c) + (Breakfast Equivalents d \div 3) + (A la Carte Equivalents e \div \$3) = Total Equivalent Meals (f)

SCHOOL (a)	TYPE SYSTEM (b)	AVERAGE NUMBER LUNCHES SERVED /DAY (c)	AVERAGE NUMBER BREAK- FASTS SERVED /DAY & MEQ (d)	AVERAGE REVENUE FROM A LA CARTE/ OTHER SALES & MEQ (e)	TOTAL MEAL EQUIV- ALENTS (f)	MPLH (g)	NUMBER LABOR HOURS ²⁴ (h)
Jones Elem.	ВС	200	90/30	\$ 29/10	240	22	11.0
Martin Elem.	ВС	301	95/31	\$ 35/11	343	26	13.2
Northside Elem.	ВС	320	89/30	\$ 45/15	365	26	14.0
Polk Elem.	ВС	275	100/33	\$ 28/9	317	26	12.2
Stewart Elem.	ВС	420	150/50	\$ 60/20	490	27	18.2
Union Elem.	ВС	290	102/34	\$ 36/12	336	26	13.0
Westside Elem.	ВС	305	105/35	\$ 31/10	350	26	13.5
Young Elem.	ВС	225	75/25	\$ 30/10	260	22	11.8
Andrew Mid.	0S-CE	400	100/33	\$ 165/55	488	17	28.7
Charles Mid.	OS-CE	300	95/31	\$ 102/34	365	16	22.8
Roberts Mid.	OS-CE	325	88/29	\$ 49/16	370	16	23.0
Jones Sr. High	OS-CE	805	200/67	\$ 275/92	964	21	46.0
Smith High	CK-BC	700	100/33	\$ 300/100	833	21	39.7
	(MEALS (PREPARED) (/SHIPPED)	(2,336)	(806/269)	(\$ 294/98)	(2,701)	(65)	41.6
TOTALS					5,721		308.7
AVERAGE MPLH					18.6		

Total Equivalent Meals (f) ÷ MPLH (g) = Number Labor Hours (h) (Obtain MPLH (g) from Exhibits 4.4 and 4.5, according to the type system, e.g., on-site production, pre-plated.)

OS = On-site Production BC = Bulk Cold CL = Conventional BH = Bulk Hot CE = Convenience PPC = Pre-plated Cold PPF = Pre-plated Frozen CK = Central Kitchen PPH = Pre-plated Hot

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To determine the cost of one labor hour (including fringe benefits) and the cost of labor per lunch, it is necessary to add together all labor costs, including fringe benefits. This can be done for the school district as a whole and by school. It will differ when done by school as a result of seniority of staff and the fringe benefits each employee participates in. Exhibit 4.9 shows how to figure the average cost of one labor hour for a district.

Exhibit 4.9. Average Cost of Labor

The average labor cost (not including central office staff) per day, hour, and lunch for a school or school district is obtained as follows:

- 1. **Add** all salaries and wages together for one year.
- 2. **Add** all fringe benefits that SFS funds pay as well as what the school district is paying for one year.
- 3. **Add** in all substitute wages for one year.
- 4. **Total** items 1, 2, and 3 and divide by number of days meals are served during school year to arrive at **AVERAGE DAILY LABOR COST.**²⁵
- 5. **Divide** total of items 1, 2, and 3 by number of daily labor hours to arrive at **AVERAGE HOURLY LABOR COST**.
- 6. **Divide** average hourly labor cost (item 5) by MPLH **or Divide** total of items 1, 2, and 3 by equivalent meals served in a school year to arrive at **LABOR COST PER LUNCH**.

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Using Form 4.6, determine the following:

- Total labor costs for the year
- Average daily labor costs for school district
- Average hourly labor costs
- Average labor cost per lunch

Form 4.6. Steps to Determining Average Cost of Labor

	8 1 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1.	Total Salaries and Wages for School-Based Employees for Year:	\$
2.	+ Fringe Benefits (Employer's Share) for Year: Social Security \$ Health Insurance Retirement Worker's Compensation Unemployment Insurance Life Insurance Subtotal:	\$
3.	+ Substitute Wages for Year	\$
4.	Total Labor Cost for Year:	\$
5.	Number Serving Days	
6.	Divide Total Labor Costs #4 by Number Serving Days #5	
	(<u>\$</u> ÷)	\$
7.	Average Daily Labor Cost	Φ
8.	Number of Daily Labor Hours(School-Based Employees)	\$
9	Divide Total Average Daily Labor Costs #7 by Number of Daily Labor Hours #8	
10.	(\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$
11.	Average Hourly Labor Cost <u>\$</u> Divided by MPLH (Use MPLH for your school, p. 4-8, b.2)	
	How much does overstaffing cost?	
12. 13.	Number Labor x Average Costs \$ Hours Overstaffed (p.4-8, d.1) of a Labor Hour (#10 above) Cost of Overstaffing Per Day	\$
14.	Number Serving Days x Cost Per Day \$ (#13 above)	
15.	Cost of Overstaffing for a Year	\$

• Total labor costs for the year

- Average daily labor costs for school district
- Average hourly labor costs
- Average labor cost per lunch

Form 4.7. Sample of <u>Completed</u> Form—Determining Average Cost of Labor (Total number employees 213)

I	(Total number employees 213)	
1.	Total Salaries and Wages for School District School-Based Employees for Year:	\$ <u>1,856,937</u>
2.	+ Fringe Benefits (Employer's Share) for Year: Social Security \$ 77,991 Health Insurance \$ 327,607 Retirement \$ 62,500 Worker's Compensation \$ 30,240 Unemployment Insurance \$ 90,360 Life Insurance \$ 30,281 Uniforms or Aprons \$ 2,132 Value of Breakfast/Lunch \$ 81,281 (\$2.12/day for lunch x 180 days x 213 employees) Subtotal:	\$ <u>702,392</u>
3.	+ Substitute Wages for Year	\$123,790
4.	Total Labor Cost for Year:	\$ <u>2,683,119</u>
5.	Number Serving Days180	
6.	Divide Total Labor Costs #4 by Number Serving Days #5	
7.	(\$2,683,119	\$14,906
8.	Number of Daily Labor Hours 1,066	
0.	(School-Based Employees)	
9	Divide Total Average Daily Labor Costs #7 by Number of Daily Labor Hours #8	
10.	(<u>\$ 14,906</u>	\$13.98
11.	Average Hourly Labor Cost \$ 13.98 Divided by MPLH 17 (Use MPLH for your school, p. 4-8, b.2)	\$8225
	How much does overstaffing cost?	
12.	Number Labor 2	
13.	Cost of Overstaffing Per Day	\$ 27.96
14.	Number Serving Days 180 x Cost Per Day \$ 27.96 (#5 above) (#13 above)	
15.	Cost of Overstaffing for a Year	\$5,032.80

Exhibit 4.10 shows examples of labor costs for preparing and serving meals using different food production systems. The MPLH for centralized production is greatly influenced by volume and automation of operation.

FOOD SYSTEM (1)	MEALS PER LABOR HOUR (2)	LABOR COST ¹ PER MEAL (3)
On-Site Production, 200 Meals ²	10	\$ 1.250
On-Site Production, 250 Meals ²	12	\$ 1.040
On-Site Production, 600 Meals ²	16	\$.766
Combination On-Site and Satellites, System-Wide ²	18	\$.694
Combination On-Site and Satellites, System-Wide ²	20	\$.625
Central Kitchen Bulk, 501—1,000 Meals ²	30	\$.417
School Finishing Kitchen, 300 Meals	22	$\frac{\$568}{= \$.985}$
Central Kitchen Bulk, 5,001—10,000 Meals ²	120 ³	\$.104
School Finishing Kitchen, 300 Meals	22	\$.568 = \$.672
Central Kitchen Pre-Plated,	55 ⁴	\$.227
1,000—2,000 Meals ² School Serving Food, 300 Meals	60	$\frac{$.208}{=$.435}$

¹Based on average hourly rate of \$12.50 (including fringe benefits).

²A minimum of 2 entrees plus chef salad lunch.

³High volume is necessary to reach these high MPLH.

⁴Automation and higher volume are necessary to reach the upper MPLH.

Exhibit 4.11 provides a district-level staffing guideline. How much staff is needed at the central SFS office is a frequent question. It should be determined by (1) number of schools to supervise and provide administrative services for and (2) responsibilities carried out by the central SFS office. Some central SFS offices handle processing of all free and reduced-price meal applications, plan all menus, and order all foods and supplies for the schools. These central SFS offices need more staff than the central SFS offices where those responsibilities are handled at the individual schools.

The decision as to whether the district-level SFS office's salaries should be included in the cost of labor or in indirect costs must be made by the school district. It should be noted that the central SFS office expense, including salaries of the staff, needs to be charged against operating SFS at the school level or paid by school board funds. Otherwise, the schools' profit and loss statements can look great but the district-level SFS office carries a big deficit with no funds to cover the cost.

If district-level SFS office staff salaries and fringe benefits are to be included in the indirect costs and charged against the individual schools, these costs should be considered when costing out a la carte food and other services provided.

An often asked question is, "How many office people does a SFA need to do the job?" Naturally it will depend on what is done in the central office, such as:

- 1. Free and reduced meal applications
- 2. Purchasing process and placing orders
- 3. Inventory extensions
- 4. Financial procedures, e.g., prepare profit and loss statements
- 5. Claims reports for state and federal reimbursements
- 6. Commodity program
- 7. Amount of computerization

The trend today is to reduce middle management and give more responsibility at the school level.

Exhibit 4.11. Administrative Staffing Guide for School Food Service

NUMBER OF SCHOOL FOODSERVICES (1)	DIRECTOR ^a (2)	SUPERVISOR ^b (3)	ASSISTANT SUPERVISOR ^c OR DIRECTOR (4)
1-15	1		
16-30	1		1
31-40	1		2
41-60	1	3	
61-80	1	4	
81-100	1	6 ^c	
101-125	1	7°	
126-150	1	8°	
151-175	1	10°	
176-200	1	12°	
201-225	1	14 ^c	

^aThe head of school foodservices is called director (this position may be called supervisor in some school districts). The assistant to the head of school foodservices is called an assistant director or an assistant supervisor.

Adapted from: Pannell, School Foodservice Management (Van Nostrand Reinhold, 1990).

Because of the varied responsibilities no established staffing guidelines are provided. It is recommended that the labor costs (including fringe benefits) should be kept at below 10% of the SF program revenue.

^bIn a foodservice covering more than 40 schools, the supervision may be divided between supervisors and assistant supervisors.

^cOne of these positions should be designated as an assistant director position.

MODULE 5

REDUCING LABOR COSTS

CONTENTS

Reduce Labor Costs

Limit Employee Breaks

Eliminate the Need for Some Positions

Reduce Cost of a Labor Hour

Reduce Costs of Fringe Benefits

Establish Teamwork and Involve Employees

OBJECTIVES OF MODULE 5

Participants will be able to:

- Identify ways to reduce labor hours needed
- Identify the cost of employee breaks
- Identify some positions that could be eliminated
- Determine ways to reduce cost of a labor hour
- Identify ways to reduce fringe benefits
- Establish teamwork while reducing cost

MODULE 5

REDUCE LABOR COSTS

The first area to look at when costs need to be reduced is labor cost, which may consume more than 50 percent of the revenue. However, to break even it is necessary to keep wages and fringe benefits costs below 50 percent (40 to 42 percent desired maximum).

Ways to reduce labor costs are many, and some involve changes in food systems used. See Module 4 for staffing and labor costs for the different food systems. Some ways of reducing labor costs are listed below.

Reduce Labor Hours Needed

Increase productivity

Train employees in time and motion economy.

Put work simplification practices into place; use mobile equipment; use short cuts.

Rearrange kitchen layout to accomplish best flow of work.

Compare costs of convenience foods with costs of making products, e.g., baking breads, pies, cookies, and cakes. See Exhibit 5.1 for such a comparison.

Compare costs of using disposable dishes, trays, and eating utensils with costs of labor to wash dishes, detergents, utilities, equipment depreciation, and replacement of dishes and dinnerware. See Exhibit 5.2 for such a comparison.

Purchase automated equipment, e.g., french fryers in which basket rises out of the fat when potatoes are done; conveyor belt for assembling large quantities of food.

Utilize vending machines as robots where and when appropriate.

Use more self-service.

Motivate employees to be creative and time-and- motion conscious.

Centralize preparation, e.g., baking (if baking is cost-effective either way).

Exhibit 5.1. Cost Comparison of Baking Bread and Using Bakery Bread

PREPARED HAMBURGER ROLLS FROM RAW INGREDIENTS		
	FROM RAW INGREDIENTS	PURCHASED ROLL

Cost of Ingredients or Product:	\$.060	\$.075
Cost of Labor: 2 hours @ \$ 8.20/hour fringe benefits + 2.70/hour \$10.90 x 2 hours = \$21.80 \$21.80 ÷ 275 Rolls = \$.079 each	.079	
TOTAL COST PER ROLL:	\$.139	\$.075

NOTE: Volume and efficiency of baker, plus rate of pay, will determine if there is a savings. In addition, students' preferences should be considered.

Exhibit 5.2. Cost Comparison of Washing Dishes with Using Disposables

ITEM (1)	COST CALCULATION (2)		COST PER DAY (3)
Using Dishes and Silver			
Straws Napkins Plates¹ Trays¹ Salad/Vegetable Dishes¹ Forks² Spoons² Dish Detergent Drying Agent Utilities (Estimated) Labor Cost (Including Fringe	\$17.00/12,500 \$29.90/10,000 \$14.90/dozen x 253 \$30.50/dozen x 25 \$17.52/dozen x 25 \$ 2.05/dozen x 25 \$ 1.42/dozen x 25 \$31.61/cases of 28, \$1.13 each \$36.12/cases of 4 gal., \$9.03 gallon \$ 9.70/hour x 3.5 hour	for 325 for 325 ÷ 720 days ÷ 720 days ÷ 720 days ÷ 360 days ÷ 360 days for 3 packages for ½ gallon	\$ 0.44 0.98 0.52 1.06 0.61 0.15 0.10 3.39 4.52 13.89 33.95
Benefits) Depreciation on Machine		Total Coat Box Down	15.56 \$ 75.17
		Total Cost Per Day:	\$ 75.17
Using Disposables			
A.5-Compartment Tray, Styrofoam Fork & Spoon Kit (Including Napkins	\$.051 x 300 \$.045 x 300		\$ 15.30 13.50
and Straws) Insert (Salad/Vegetable/ Fruit)	\$.030 x 300		9.00
		Total Cost Per Day:	\$ 37.80
B.Sandwich Wrap Paper or Styrofoam Tray (10" x 12")	\$.020 x 300 \$.070 x 300		\$ 6.00 21.00
Fork Kit (Including Napkins	\$.041 x 300		12.30
and Straws) Insert (Salad/Vegetable/ Fruit)	\$.020 x 300		6.00
French Fry Bag	\$.005 x 300		<u>1.50</u>
		Total Cost Per Day:	\$ 46.80

¹ Used for 4 school years (720 days). ²Used for 2 school years (360 days). ³25 dozen equals 300.

Note: Local labor availability and cost per labor hour and environmental concerns need to be evaluated

with above data.

Convert small schools to satellite operations. Compare labor hours needed for on-site production to those needed for a bulk satellite system.

If there are long breaks between serving periods, discuss with principal the need to reduce breaks and shorten lunch serving time.

Reduce employee turnover.

Time how long it takes to prepare recipes and to do common procedures, e.g., dishing canned fruit into portions; set standards and expect employees to meet standards within an established time.

Set as goal each year to increase productivity by one meal per labor hour (MPLH). Complete exercise using Form 5.1 (below) to determine savings you would realize.

Form 5.1. Comparison of Cost According to Staffing MPLH

Projected average number meal equivalents (MEQ)	per day(a)
Present MPLH(b) (See p. 4.8 for your MPl	$MPLH \underline{\hspace{1cm}} + 1 = \underline{\hspace{1cm}}$
Average cost per labor hour \$(d) (See p. 4.19 for average Number serving days(e)	e cost per labor hour)
A. MEQ (a) ÷ MPLH (b) Labor Hours (f) x Cost (d) \$ Cost of Labor (g) \$ x Days (e)	= Cost of Labor per Day (g) \$
B. MEQ (a) ÷ MPLH (c) Labor Hours (i) x Cost (d) \$ Cost of Labor (j) \$ x Days (e)	= Cost of Labor per Day (j) \$
C. Cost of Labor for Current Year (h) Less Cost of Labor for Current Year (k) Savings from Increasing MPLH by One (l)	\$ (—) \$

Completed Exercise:

Using 400 MEQ per day, present MPLH rate of 15, and 180 contract days, average cost per labor hour of \$10.50, and Form 5.2 (below), determine how much labor costs would be reduced in your school district if you increased MPLH by two.

Form 5.2. Completed Sample Comparison of Cost According to Staffing MPLH

Projected average number meal equivalents (MEQ) per day ___ (a) Present MPLH Average cost per labor hour \$____ 10.50 (d) Number serving days _____ (e) **A.** MEQ (a) $400 \div \text{MPLH (b)}$ 15 = Labor Hours (f) 27 Labor Hours (f) $\underline{27}$ X Cost (d) $\underline{\$}$ $\underline{10.50}$ = Cost of Labor per Day (g) $\underline{\$}$ $\underline{283.50}$ Cost of Labor (g) $$283.50 \times Days$ (e) 180 = Cost of Labor per Year (h) \$51,030**B.** MEQ (a) 400 ÷ MPLH (c) 17 = Labor Hours (I) 23.5 Labor Hours (I) $\underline{23.5}$ X Cost (d) $\underline{\$}$ $\underline{10.50}$ = Cost of Labor per Day (j) $\underline{\$}$ 246.75 Cost of Labor (j) 246.75 x Days (e) 180 = Cost of Labor per Year (k) 44,415C. Cost of Labor per Current Year (h) Less Cost of Labor per Year (k) Savings from Increasing MPLH by Two (2) 6,615

LIMIT EMPLOYEE BREAKS

- Use timer to remind employees break is over. See sample cost of breaks in Exhibit 5.3. Use Form 5.2 to figure cost of breaks in your district.
- Consider when breaks should be provided. (There is no federal law requiring that a break be given an employee. Some states have labor laws that establish requirements, e.g., Kentucky requires that a minimum break of 10 minutes during each four-hour period worked, KRS 337.365.)
- Schedule employees to eat lunch on their own time.
- Schedule arrivals and departures of employees to make a break unnecessary. See cost of time in Exhibit 5.3 and complete Form 5.3 to determine school or school district's cost.

Exhibit 5.3. Sample Cost of a Break

If (1)		(2)	(3)
Average Wage per Labor Hour	=	\$ 8.00	\$12.00
Average Fringe Benefits	=	2.00	5.00
Total Cost per Labor Hour	=	\$10.00	\$17.00
15 Minute Break @ \$10.00	=	\$ 2.50	\$ 4.25
\$2.50 per Day x 180 Days 6 Employees x \$450	= =	\$450 per Year \$2,700 per Year	\$765 per Year \$4,500 per Year
A Break of 15 Minutes and 6 Employees Wou Cost?	ıld	\$2,700 per Year	\$4,500 per Year

Determine the cost of breaks by completing Form 5.3.

Form 5.3. Cost of Breaks

Average Cost of Labor Hour Including Fringe Benefits	\$
Cost of 15 Minute Break Per Day	\$
Number of Employees Getting Break	X
Daily Cost of Breaks	\$
Number of Serving Days	X
TOTAL COST PER YEAR	\$

ELIMINATE THE NEED FOR SOME POSITIONS

• Prepare work schedules and schedule employees when needed; eliminate overtime; schedule "dead time" or "idle time" (time between lunch lines or periods) to do useful jobs.

- Simplify and standardize programs and menus. (This has been the key to McDonald's success.)
- Pre-portion as many foods as possible, so that one server and one cashier can handle one serving line.
- Utilize volunteers and student labor.
- Compare cost of washing dishes with using disposable products. See cost comparison in Exhibit 5.2.

REDUCE COST OF A LABOR HOUR

- Establish dual-manager or multi-manager roles whereby a manager is responsible for two or more school food services, thus eliminating some manager positions.
- Eliminate the need for cooks and bakers by purchasing convenience foods and simplifying menus. Compare the costs before taking this step. See cost comparison sample in Exhibit 5.1.
- Utilize time (hours) of the more expensive labor effectively.
- Use temporary or substitute employees for heavy work days with harder-to-prepare menus versus having a permanent employee.
- Control use of overtime and require that employees have director's approval before working overtime.
- Check time and attendance records. Require employees to be at work on time.
- Compare pay scale with competitors in the food industry in the area; freeze pay scale to get closer to what the commercial foodservice industry pays. See Exhibit 5.1.
- Restructure pay scale and bring it in line with the commercial foodservice industry pay scale in the area.
- Insert a new "entry" level or "in training" level in pay scale for inexperienced employees who are hired. Set standards of productivity that those employees have to meet before being paid at the next pay scale level.
- Establish length of contract to relate more closely to days serving. If participation begins to decrease before summer break, consider different length contracts, e.g., 175 days instead of 180 days.

• Eliminate automatic step increases and/or cost-of- living (COL) raises; replace with merit pay, profit sharing, or bonuses for outstanding service.

REDUCE COSTS OF FRINGE BENEFITS

- Limit benefits to managers or full-time employees.
- Increase deductible on health insurance.
- Request proof of sickness when more than two days are used, if allowable.
- Provide incentives for not using sick leave and for maintaining good attendance and a good safety record.
- Have no more employees assigned to a location than needed at the peak time to provide the service.
- Give each employee the option of fringe benefits, such as health insurance, or a higher hourly pay rate.

ESTABLISH TEAMWORK AND INVOLVE EMPLOYEES

- Involve employees in determining ways to reduce labor costs.
- Motivate employees to produce efficiently.
- Improve morale if it is a problem.
- Rotate employees whereby all can do all jobs. Assign employee doing best at a job to that job the majority of the time for improved efficiency and quality product.

MODULE 6 DETERMINING EXPENSES—FOOD COSTS

CONTENTS

Determine Food Costs

Precost Recipes and Menus

Reasons for Postcosting

Percent of Food Costs to Revenue

How the Food Dollar Is Spent

Inventory Control

Determine the Cost of a Meal

OBJECTIVES OF MODULE 6

Participants will be able to:

- Determine food costs
- Understand reasons for precosting
- Understand the value of postcosting
- Understand the relationship of costs to revenue
- Evaluate the value of perpetual inventories compared to physical inventories
- Determine number of inventory turnovers per month and how many days of inventory a school has
- Determine cost of a meal

MODULE 6

DETERMINE FOOD COSTS

It is estimated that about 20 percent of the food used in the reimbursable lunch program is received from the United States Department of Agriculture (USDA). The value of entitlement commodities offered in 2000-2001 was 14.75 cents per lunch; however, a school district often does not receive or use its total entitlement. Some school districts receive more.

Many people consider USDA commodities free food and do not place a value on that food when costing out a menu; however, if USDA commodities are reduced or are not available, the food must be replaced with purchased food. Therefore, it is suggested that the value of commodities received be included in the precosting of a lunch. Some school districts show commodities used as revenue (income) and commodities used as expense. The average **value** of entitlement commodities per meal (provided annually to school districts by the State Commodity Distribution Office) may be used, or an actual usage figure, as shown in Exhibit 6.1. Many school districts do not accept or use all their entitlement commodities, and using the entitlement rate may inflate the value received.

To determine food costs, add the beginning-of-month inventory to the cost of food purchased (or the value of USDA commodities received) and subtract the end-of-month inventory (see Exhibit 6.1).

Exhibit 6.1. Sample Determining Food Costs

To figure food costs for a month.	
To figure food costs for a month:	
Beginning-of-Month Purchased Inventory ²⁶	\$ 6,782
+ Food Purchases During Month	13,862
— End-of-Month Inventory ¹	5,375 ¹
Total Purchased Food Cost for Month	\$ 15,269
To figure value of USDA commodities for month:	
Beginning-of-Month Commodity Inventory ¹	\$ 1,202
+ Commodities Received During Month	562
— End-of-Month Commodity Inventory ¹	1,001 ¹
Total Value of USDA Commodity Food for Month	<u>\$ 763</u>
TOTAL OF PURCHASED AND COMMODITY FOODS	\$ 16,032

PRECOST RECIPES AND MENUS

Precosting is very useful in determining if the food item or menu is affordable. It establishes the ideal food cost for a menu or food item. However, it should be kept in mind that waste from preparing too much or serving larger portions than planned can make the item cost more than planned.

 $^{^{26}\}mbox{Note:}\,$ The end-of-month inventory is next month's beginning inventory.

An example of a precosted recipe is shown in Exhibit 6.2. Exhibit 6.3 provides examples of food prices to use in costing recipes and menus. Complete the precosting exercise using Form 6.1 for practice.

Exhibit 6.2. Precosting a Recipe

TACO SALAD BAR Chili with Beef and Beans

Number portions: 336 1/3 cup Portion Cost: \$0.064 Recipe yield: 7 gal Total Cost: \$21.434

Portion: 1/3 cup, 3 oz Preparation Time: 45 min/7 gal

Plan group: meat/meat alternate Yields: 1 oz. meat/meat alternate

Cook utensil: Kettle Cook time: 30 min Cook temp: 170° F

Food File Number	Ingredient Name	Quantity	Item Cost
156	Textured vegetable protein	14 oz	\$ 0.411
0	Water	2 ½cup	·
520	Beef	5 lb	5.756
17	Onions, dehydrated	1 cup	0.182
157	Flour, all purpose	1 cup	0.042
0	Water	1 cup	
76	Beans, kidney	4 ½ gal	9.950
122	Chili powder, ground	10 Tbsp	0.499
85	Tomato paste	1 gal	4.593
0	Water	2 qt	
		TOTAL COST	\$21.434

Instructions

- 1. Add water to textured vegetable protein.
- 2. Brown beef, onions, and reconstituted textured vegetable protein; drain.
- 3. Make a paste of flour and water; add to meat; stir constantly.
- 4. Add beans, chili powder, tomato paste, and water to meat mixture. Simmer until internal temperature reaches 170° F.
- Transfer into soup crock or serving pan for service. Reduce heat to prevent over-thickening. (Add water to thin.)

Source: Pannell, Dorothy, School Foodservice Management (Van Nostrand Reinhold, 1990).

Exhibit 6.3. Sample Cost of Food Items

ITEM (1)	TEM UNIT UNIT		NUMBER SERVINGS OR UNITS (4)	COST PER PORTION OR SERVING (5)
Bread:				
Crackers	500/case	\$ 8.52	500	\$.02/pkt
White pullman	Loaf	\$.53	26 slices	\$.02/slice
Hamburger roll	Dozen	\$.64	12	\$.06/roll
Steak roll	Dozen	\$ 1.08	12	\$.09/roll
Kaiser roll	Dozen	\$ 1.70	12	\$.15/roll
Pita bread, 6"	Dozen	\$ 2.02	12	\$.17/pita
Croissant, frozen	144/case	\$ 26.49	144	\$.19 each
Vecatables				
Vegetables: Potatoes, dehydrated	6/#10/case	\$ 30.80	874	\$.04 serv ¹
Potatoes, french fry	27 lb/case	\$ 9.56	237	\$.04 serv \$.05 serv ¹
Potatoes, rounds	30 lb/case	\$ 9.93	163	\$.03 serv \$.07 serv ¹
Peas, green,	6/#10/case	\$ 10.40	132	\$.07 serv \$.08 serv ¹
Corn, cut, canned	6/#10/case	\$ 13.76	120	\$.08 serv \$.12 serv ¹
Green beans, canned	6/#10/case	\$ 19.15	129	\$.12 serv \$.15 serv ¹
Green beans, camed	O/ II TO/ Cuse	ψ 17.13	12)	ψ.13 361 ν
Milk:				
Milk, skim, ½ pint	50/case	\$ 6.50	50	\$.13 serv
Milk, whole, ½ pint	50/case	\$ 6.75	50	\$.14 serv
Milk, chocolate, ½ pint	50/case	\$ 7.00	50	\$.14 serv
Cheese:				
Cheese, American	20 lb/case	\$ 29.20	320 oz	\$.09 oz
Cheese, cheddar	20 lb/case	\$ 34.00	320 oz	\$.07 oz \$.11 oz
Cheese, cottage	5 lb/carton	\$ 4.65	20	\$.24 serv ¹
cheese, cottage	3 10/Carton	Ψ 1.02	20	ψ.213017
Soup:				
Soup, tomato, canned	12/50 oz	\$ 14.60	138	\$.11 serv ²
	Cans/case			
Soup, vegetable beef,	12/50 oz	\$ 27.35	138	\$.20 serv ²
canned	cans/case			
Fruit:				
Grapes, green	Pound	\$.82	10	\$.09 serv ⁴
Oranges, fresh	138/case	\$ 11.33	138	\$.09 serv ³
Apples, delicious, fresh	175/case	\$ 16.80	175	\$.10 serv ³
Oranges, fresh	125/case	\$ 12.42	125	\$.10 serv ³
Applesauce, canned	6/#10/case	\$ 14.02	138	\$.11 serv ¹
Pears, halves, canned	6/#10/case	\$ 17.83	156	\$.12 serv ¹
Apples, delicious, fresh	125/case	\$ 17.20	125	\$.12 serv ³
Peaches, slices, canned	6/#10/case	\$ 19.42	138	\$.14 serv ¹
Fruit cocktail	6/#10/case	\$ 21.62	138	\$.16 serv ¹
Meats:				

ITEM (1)	PURCHASE UNIT (2)	COST PER PURCH. UNIT (3)	NUMBER SERVINGS OR UNITS (4)	COST PER PORTION OR SERVING (5)
Bologna, turkey	Pound	\$.69	16	\$.05 oz
Salami, turkey	Pound	\$.99	16	\$.06 oz
Ham, turkey	Pound	\$ 1.29	16	\$.08 oz
Hot dog, turkey	80/box	\$ 6.95	80	\$.09 serv
Chicken patties	60/case	\$ 15.99	60	\$.27 serv
Beef patties, cooked, 1.7 oz	150/case	\$ 23.24	150	\$.16 serv
Beef patties, cooked, 2.9 oz	102/case	\$ 30.69	102	\$.30 serv
Burritos, frozen	60/case	\$ 21.49	60	\$.36 serv
Pizza:				
Pizza, cheese	54/case	\$ 17.05	54	\$.32 serv
Pizza, sausage/cheese	96/case	\$ 33.60	96	\$.35 serv
Condiments:				
Mustard	4/gal/case	\$ 6.40	1,024	\$.01 Tbsp
Mustard	500 pkt/case	\$ 3.55	500	\$.01 pkt
Catsup	6/#10/case	\$ 16.10	1,094	\$.02 Tbsp
Catsup	1000 pkt/case	\$ 11.55	1,000	\$.02 pkt
Mayonnaise	4/gal/case	\$ 15.40	1,024	\$.02 Tbsp
Pickles, relish	4/gal/case	\$ 18.85	256/gal	\$.02 Tbsp
Pickles, relish	200 pkt/case	\$ 3.70	200	\$.02 pkt
Mayonnaise	200 pkt/case	\$ 4.90	200	\$.03 pkt
Pickles, slices, dill	4/gal/case	\$ 13.20	552	\$.03 4 sl
Pickles, slices, sweet	4/gal/case	\$ 17.10	552	\$.04 4 sl

Abbreviations:

cnd	= canned	sau = sausage
cs	= case	$serv^1 = \frac{1}{2} cup$
dhyd	l = dehydrated	$serv^2 = 1 cup$
ea	= each	$serv^3 = each$
FF	= french fries	$serv^4 = 1/4 cup$
gal	= gallon	sl = slice
OZ	= ounce	Tbsp = tablespoon
pkt	= packet	6/#10 = 6 number 10 cans
lb	= pound	purch = purchase

Exercise:

Using Form 6.1 and cost of food in Exhibit 6.2, precost 100 hamburger sandwiches.

Form 6.1. Precosting a Recipe

HAMBURGER SANDWICH					
Number portions: Total Cost: \$ Recipe yield: Portion: Plan group: meat/meat alternate		Portion Cost: \$ Preparation Time:	Portion Cost: \$ Preparation Time:		
Cook utensil:		Yields:			
Cook time: Cook temp:	minutes F				
Food File Number	Ingredient Name	Quantity	Item Cost		
			\$ <u> </u>		
			<u>-</u>		
			.		
			<u>-</u>		
INSTRUCTION	INSTRUCTIONS:				
		TOTAL COST	\$ <u>.</u>		

Form 6.2. Sample Precosted Standardized Recipe for Cheeseburgers

CHEESEBURGER SANDWICH Meat/Meat Alternate

Number portions: 100 Total Cost: \$ 36.61

Recipe yield: 100 Portion Cost: \$.37²⁷ Each: \$.366 or .37

Portion: 1 Preparation Time: 30 min.

Plan group: meat/meat alternate

Cook utensil: Yields: 100

Cook time: 10 minutes Cook temp: 160 ° F

Food File Number	Ingredient Name	Quantity	Item Cost
	Hamburger Pattie, Pre-Cooked, 1.7 oz (20% fat)	100	\$ <u>16.00</u>
	Cheese, Lowfat, Sliced, 1 oz	100	9.00
	Hamburger Bun	100	6.00
	Pickles, Dill	400 sl	3.00
	Catsup, 5/8 oz, pkt	100 pkt	2.00
	Mustard, 5/8 oz, pkt	60 pkt	.61

INSTRUCTIONS:

- 1. Cook patties on pan liner on bun pan in oven at $350^{\circ}F$ until patties reach internal temperature of $160^{\circ}F$.
- 2. Put a cheese slice on hamburger as soon as it comes from the oven.
- 3. Warm hamburger buns.
- 4. Assemble and wrap. Keep hot until time of service.

	TOTAL COST	\$ <u>36.61</u>
--	------------	-----------------

Contribution to Traditional Meal Pattern: 2 meat/meat alternate 1.5 servings of bread/grain

²⁷Round up costs.

The cost of food items in Exhibit 6.3 is arrived at by determining the number of servings or portions each purchase unit will provide. The USDA *Food Buying Guide* may be used, if not a preportioned item.

Exhibit 6.4 illustrates precosting a menu using per serving prices found in Exhibit 6.3. Under offer versus serve all students may not take all foods allowable, which is illustrated with milk in Exhibit 6.4. Therefore, a forecasted number of servings ordinarily served is needed. This forecast is obtained from prior production records, which report what was actually used.

Also, when choices are offered, the average cost needs to be determined, as illustrated in Exhibit 6.4. The most accurate way of arriving at the average cost of a menu item is to use a forecasted number of servings and cost per serving to project out total cost of the menu item(s) and then divide by forecasted number of servings.

When planning menus, it is helpful to have the cost per serving of different foods in front of you. Exhibit 6.3 shows how to use some typical costs of individual menu items to arrive at a day's average menu cost. It is useful to have menu items ranked by cost from least expensive to most expensive, e.g., applesauce, 10ϕ per portion; peach slices, 15ϕ per portion; pear halves, 16ϕ per portion.

Exhibit 6.4. Sample Precosting an Elementary-School Menu Under Food-Based²⁸

					TOTAL COST		
MENU ITEM	MENU	SIZE SERVING	FORECAST NUMBER SERVINGS	COST PER SERV- ING	USDA COMMOD- ITIES	PUR- CHASED FOOD	AVERAGE COST OF LUNCH ¹
Meat/ Meat Alternate	Grilled Hamburger or Cheeseburger	1, 2 oz 1, 1.7 oz pattie 1 oz cheese	100 100	\$.30 \$.25		\$30.00 \$25.00	\$.275
Vegetables	Potato Rounds or Seasoned Green Beans or	½ cup ½ cup	200 ²⁹ 30	\$.11 \$.18	\$ 5.40	\$ 22.00	.241
Fruits	Green Seedless Grapes or Sliced Peaches, Lite	½ cup ½ cup	75 95	\$.10 \$.14		\$ 7.50 \$ 13.30	
Bread	Hamburger Buns, 1 ½ oz	1	200	\$.06		\$ 12.00	.060
Other Food	Mustard/ Catsup/ Pickles	1 pkt 1-2 pkt 3 slices	50 300 50	\$.01 \$.02 \$.01		\$.50 \$ 6.00 \$.50	.035
Milk	Choice of Milk: Skim or Whole or Chocolate, 1%	^{1/} 2 pint	20 50 120	\$.13 \$.14 \$.14		\$ 2.60 \$ 7.00 \$ 16.80	.132
	TOTAL COST O	OF FOOD USED	INCLUDING CO	MMODITIE	S	\$147.60	\$.743
				COST	Γ PER LUNCH		\$.75

Forecast Number:

Students	185
Adults	15
A La Carte	50 servings potatoes
_	= =

Total Lunches: 200

Exercise:

Using the costs in Exhibit 6.2 and using Form 6.3, precost the following menu for the number forecasted:

Form 6.3. Precosting a Menu

²⁸With other menu planning options the cost may vary.

²⁹Plus 50 portions for a la carte sales.

					TOTAL COST	T OF FOOD RED	
MENU ITEM	MENU	SIZE SERV- ING	FORECAST NUMBER SERV- INGS	COST PER SERV- ING	USDA COMMOD- ITIES	PUR- CHASED FOOD	AVERAGE COST OF LUNCH
Meat/ Meat Alternate	Ham & Cheese	1 ½ oz 1 oz	350 350				
Vegetables Fruits	Tomato Soup or Fresh Apples or Sliced Peaches	1 cup 1 ½ cup	100 200 300				
Bread	Croissant Crackers	1 1 pkt	350 100				
Other Food	Mustard/ Mayonnaise	1 pkt 1 pkt	100 350				
Milk	Choice of Milk: Skim or Whole or Chocolate	½ pt	25 25 275				
	,			COST OF FO			
Forecast Numb	er:				<u> </u>	Actual Num	ber Served:

Forecast Number:	Actual Number Served:
StudentsAdultsA La Carte	
Total Lunches:	

Using the costs in Exhibit 6.3, the following is the precosted menu for the number forecasted:

Form 6.4. Sample of Completed Precosted Menu

					TOTAL COST PREPA		
MENU ITEM (1)	MENU (2)	SIZE SERV- ING (3)	FORECAST NUMBER SERV- INGS (4)	COST PER SERV- ING (5)	USDA COMMOD- ITIES (6)	PUR- CHASED FOOD (7)	AVERAGE COST OF LUNCH (8)
Meat/ Meat Alternate	Ham & Cheese	1 ½ oz 1 oz	350 350	\$.12 .09		\$ 42.00 31.50	\$.210
Vegetables Fruits	Tomato Soup or Fresh Apples or Sliced Peaches	1 cup 1 ½ cup	100 200 300	.11 .14 .14	\$ 42.00	11.00 28.00	.232
Bread	Croissant Crackers	1 1 pkt	350 100	.19		66.50 2.00	.196
Other Food	Mustard/ Mayonnaise	1 pkt 1 pkt	100 350	.01		1.00 10.50	.033
Milk	Choice of Milk: Skim or Whole or Chocolate	½ pt	25 25 275	.13 .14 .14		3.25 3.50 38.50	.130
	TOTAL CO	OST OF FOO	DD USED INCLU	DING COM	MODITIES	\$279.75	\$.801 ³⁰
		C	OST PER LUNC	Н			\$.81

Forecast Number:	Actual Number Served:
Students 330 Adults 20 A La Carte	
Total Lunches: 350	

³⁰Round up cost.

REASONS FOR POSTCOSTING

Precosting **sets a standard** as to how much the menu should cost. Postcosting **checks those standards.** Precosting can be used to check postcosting or "actual food costs" for excessiveness. The actual cost of producing and serving a menu may be much greater than the precosted menu. To determine postcost of a menu or food item, a record of all foods taken from storage should be made and costed out. The value of leftovers may be deducted if the leftovers will be effectively used. Production records must be completed for all foods prepared. The production form may be used for costing, as shown in Exhibit 6.5, or a form such as that used in Form 6.6.

Using USDA's new Guidelines for Healthy Eating may cause the costs of serving school breakfasts and lunches to go up. This should be considered when selecting a menu planning option to be used and when determining meal prices charged.

Precosting may be of little value, and in fact may mislead a director, if controls are not carried out in preparation, serving, and handling leftovers. Module 7 will discuss how the cost of menus can be reduced.

6-104 Cost Control - Module 6

Exhibit 6.5. Production Record with Postcosting of Food

1. Date <u>9-15</u> -	93_	2. Offe	er Versu	s Serve	Y	'es N	0		
3. MENU									
	Oven Fried Green Bean Mashed Pot	Chicken s atoes	O	Peaches Mixed Fi range Juic	ruit e		l N	Rolls Milk	
	4.	5.	6.	7. PLAN # Portions/Si	NED ize Portions	8.	9.	10.	11.
	Foods Used	Yield From FBG or CAN	USDA Foods	GR III	GR IV	Amount Prepared	Left Over and/or Extra Sales	Cost per Unit	Cost per Menu Item
MILK ½ pt		½ Pints Available 400					50**	\$.141 each	\$ 49.35
MEAT/MEAT ALTERNATE Grades K-3 1 ½ oz Grades 4-6* 2 oz	Chicken, Whole, Cut-up	2.85 (2 oz)			450/2 oz	160 lbs	20 lbs or 55 servings	140 lbs @ \$.67/lb	93.80
VEGETABLES/ FRUITS	Green Beans, Canned	22.65 (½ c)			200/1/2 c	9 #10	1/8 can left	\$3.19/ #10 can	28.71
(2 or more)	Mashed Potatoes	Granl. 25.25 (½ c)			250/1/2 c	10 lbs	over***	\$5.13/ #10 can	16.26
Grades K-3	Peaches, Canned	Diced 24.35 (½ c)			50/1/2 c	2 #10		\$3.57/ #10 can	7.14
Grades 4-6* 3/4 c	Fruit Cocktail, Canned	23.45 (½ c)			50/1/2 c	2 #10		\$4.03/ #10 can	8.06
	Orange Juice	IPP (4 oz)			100/3/8 c	100	3 left over**	\$.14 each	13.58
GRAIN BREADS 12 servings per week	Rolls	Recipe A			600/2 oz	600	200	\$.06 each	24.00
OTHER FOODS	USDA Honey					10 lb		\$.60/lb	6.00
								TOTAL FOOD COST	\$246.90
12. Reimbursable m	neals served:			13. Nonreim	bursable mea	ls served and ex	tra food sold:		
GR III (K-3) GR IV (4-12) *Total Reimburs **Useable ***Not Reused		5 <u>0</u>		Extra Sa Adult/M Nonreve (Not Inc	ales (Menu Ite ales (Non-Men lisc. Meals enue Meals luded)	u Items)	= <u>380</u> TOT SERVE	AL MEALS	or \$.71 Each Lunch
				Total A	la Carte	335	SERVE	J.D	

FBG = Food Buying Guid	FBG =	= Food	Buying	Guide
------------------------	-------	--------	---------------	-------

GR = Group C = Cup

CN = Child Nutrition K = Kindergarten

= Number

Exercise:

The following is the postcosted menu in Form 6.4, when the projections were as indicated and the number served were less.

Form 6.5 Sample Completed Form for Postcosting Menus on Food-Based

	0.5 Sample									
					TOTAI FOOD I	COST OF PREPARED				
MENU ITEM	MENU	SIZE SERV- ING	FORE- CAST NUM- BER SERV- INGS	COST PER SERV- ING	USDA COM- MOD- ITIES	PUR- CHASED FOOD	AVER- AGE COST OF LUNCH	NUM BER SERV- ED	USABLE LEFT- OVERS	TOTAL COST FOR MENU SERVED
Meat/ Meat	Ham & Cheese	1, 1 ½ oz 1, 1 oz	350 350	\$.12 .09	\$	\$ 42.00 31.50	\$.210	320	20	\$ 69.30
Alternate	Sandwich	·								
Vegetables	Tomato Soup	1 cup	100	.11		11.00		75	- 0 -	11.00
	Fresh Apples	1	200	.14		28.00	.232	175	25	24.50
Fruits	or Sliced Peaches	½ cup	300	.14	\$ 42.00			280	20	39.20
Bread	Croissant Crackers	1, 2 oz 1 pkg, 4 pieces	350 100	.19 .02		66.50 2.00	.196	320 100	- 0 - 100	66.50 2.00
Other Food	Mustard/ Mayonnaise, Lite	1 pkt 1 pkt	100 350	.01 .03		1.00 10.50	.033	100 350		1.00 10.50
Milk	Choice of Milk: Skim or	½ pint	25	.13		3.25		20	5	2.60
TVIII.	Whole		25	.14		3.50	.13	21	4	2.94
	or Chocolate, 1% Fat		275	.14		38.50		260	15	36.40
				L COST UNCH	\$42.00	\$279.75	\$.801			\$265.94
			INCLU	COST PE DING VALUI	ER LUNCH E OF COM	MODITIES				\$.84 ³¹

Forecast Number:	Actual Number Served:	
Students 330		302
Adults20		18
A la Carte	_	

Total Lunches: 350 320
The following is the postcosted menu in Form 6.4, when the projections were as indicated and the number served were less.

Form 6.6 Form for Postcosting Menus Under Food-Based

		TOTAL FOOD P	COST OF		

³¹Costs have been rounded up.

MENU ITEM	MENU	SIZE SERV- ING	FORE- CAST NUM- BER SERV- INGS	COST PER SERV- ING	USDA COM- MOD- ITIES	PUR- CHASED FOOD	AVER- AGE COST OF LUNCH	NUM BER SERV- ED	USABLE LEFT- OVERS	TOTAL COST FOR MENU SERVED
Meat/ Meat Alternate	Ham & Cheese Sandwich	1, 1½ oz 1,1 oz	350 350	\$	\$	\$	\$			\$
Vegetables Fruits	Tomato Soup or Fresh Apples or Sliced Peaches	1 cup 1 1/2 cup	100 200 300							
Bread	Croissant Crackers	1, 2 oz 1 pkg, 4 pieces	350 100							
Other Food	Mustard/ Mayonnaise, Lite	1 pkt 1 pkt	100 350							
Milk	Choice of Milk: Skim or Whole or Chocolate, 1% Fat	½ pint	25 25 275							
			TOTAL (COST OF NCH	\$	\$	\$			\$
			INCLUI	COST PE DING VALUE	R LUNCH E OF COMM	10DITIES				\$

Forecast Number:	Actual Number Served:	
Students Adults A la Carte		<u>-</u>
Total Lunches:		_

PERCENT OF FOOD COSTS TO REVENUE

Standards need to be set by each district school foodservice (SFS) as to what percentage of the revenue can be used for food, whereby the SFS director and managers will know when a precosted menu item is too high. This information can be useful when discussing new products with sales people. These standards also give directions as to where the problem is when the revenue does not cover the expenditures. Sample percentages of revenue used for each cost category are shown in Exhibit 6.6. See Exhibit 2.5 for recommended percentage of cost to revenue.

Exhibit 6.6. Sample Percent of Expense to Revenue

Revenue	100%
Labor Costs (including fringe benefits)	40-47%
Food Costs (including value of commodities)	37-40%
Direct Overhead ³²	5-6%
Indirect Overhead ¹	5-6%
Small and Large Equipment	2%
Profit Margin	3-4%
TOTAL	100%-105%

³²Direct overhead includes line items, e.g., cleaning supplies, telephone; indirect overhead includes those charges lumped together which may be based on percentage (e.g., utilities).

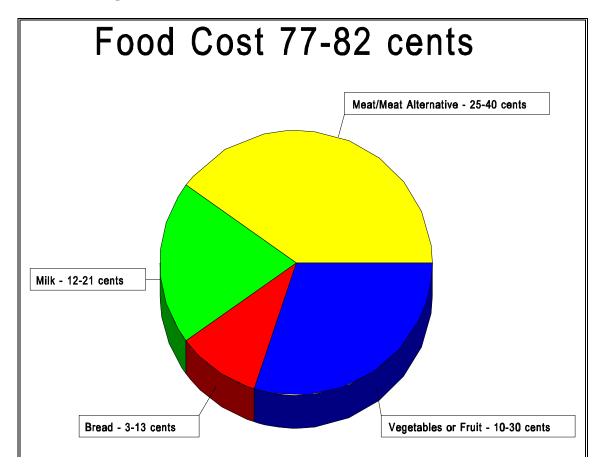
³³Over 100% is more expense than revenue; therefore, there would be no profit margin but rather a deficit or loss; thus if labor costs are high the food cost and/or other costs have to be lower to break even or to make a profit.

HOW THE FOOD DOLLAR IS SPENT

The reimbursable school lunch must meet the five-food-item requirement. If offer versus serve is carried out, some students will select as few as three items if four are offered and the lunch will still qualify for reimbursement.

Exhibit 6.7 illustrates the range in cost of menu items for different school districts. In 1991, the average food costs ranged between 60 and 82 cents per meal. When USDA commodities are available, the purchased foods may cost less than 60 cents.

Exhibit 6.7. Sample Cost of Food Purchased — Lunch Meals



Exercise:

If the revenue per lunch is \$1.92 and food cost is 77ϕ , what percentage of the revenue is spent for food?

INVENTORY CONTROL

Inventory is defined in this context as the food and supplies on hand, which are "assets." There are two ways of determining what is in inventory—using perpetual inventory and taking a physical inventory.

Perpetual Inventory—is a continuous record of food and supplies purchased, in storage, and used. It is required by many states, e.g., Virginia Department of Agriculture, on all USDA donated foods. A perpetual inventory must be updated daily in order to be meaningful, recording what is received, what is removed from inventory to be used, and what is left in storage. The amount of inventory in storage is a running balance (see Exhibit 6.8), as illustrated below:

Exhibit 6.8. Sample Perpetual Inventory Card

Description: <u>Canned, sliced, light syrup</u>
Price per unit: \$19.42 Price per unit:

Date	In	Out	Balance	Date	In	Out	Balance
Date	411	Out	Datance	Date	111	Out	Dalance
08/30	8	0	8	11/28	8	2	9
09/14	0	3	5	12/7	0	3	6
09/28	3	2	6	12/15	3	1	8
10/10	0	3	3	01/08	0	3	5
10/16	0	1	2	01/19	0	2	3
10/27	5	0	7	01/30	8	3	8
11/14	0	4	3				

Perpetual inventory is time-consuming to maintain on all foods and supplies if a computer is not being used. Some foodservice directors discontinued perpetual inventory in general during the early 1980s because of high labor costs, but may have resumed it for USDA commodities, because it became a requirement by some state departments in the late 1980s.

Perpetual inventory is a worthwhile cost-control measure. The higher labor costs and inventory hours using a perpetual inventory can be reduced by use of a computerized inventory control system. It is recommended that a perpetual inventory be kept at a minimum on a few high-priced items, as well as all USDA commodities. Perpetual inventories are recommended especially for warehouses and for large production facilities, e.g., central kitchens.

The value of inventory in storage is arrived at by multiplying the price paid by number of cases or purchase units in storage, e.g., 8 cases of peaches x \$19.42/case = \$155.36.

It is wise to check perpetual inventories frequently by carrying out a physical inventory. Perpetual inventories may be way off. When this is the case, it should be determined why this is true. Is inventory being stolen? Are all transactions being recorded? Are there mathematical errors?

Physical Inventory—value is obtained by actually counting all items in storage and giving a value to them (see Exhibit 6.9). The value in total dollars is the value of the inventory at that **point in time**. USDA regulations require an annual physical inventory, and an accurate and complete record of commodities received and disposed of. The value of the inventory in storage is arrived at by adding together the value of all items in inventory.

Accurate inventories are essential to accurate profit and loss statements. The inventory should be taken at the end of the month or as close to that time as possible, if the food purchases are being used for that period of time. There is much controversy as to what value should be placed on inventory: (1) price paid, (2) replacement price (present cost), or (3) average price of all inventory in stock. It is recommended that the replacement price (most recent price) for purchased items be used if it is not practical to use the actual price paid when several different prices were paid.

If a large delivery is received on the day inventory is taken (counted) or the day after, the delivery should be included in the inventory only if the delivery will be included in accounts payable for the month.

It is recommended that two people take inventory, with one person recording while the other actually counts quantity on hand. The most important thing to remember about taking physical inventory is to be consistent and count the same way each time inventory is taken. Some decisions to be made about inventory are listed on the next page in Exhibit 6.10.

Exhibit 6.9. Sample Physical Inventory

ITEM NO. (1)	ITEM NAME (2)	PACK (3)	INVENTORY UNIT (4)	PRICE/ INV. UNIT (5)	NUMBER UNITS ON HAND (6)	TOTAL VALUE (7)
270	Pizza, Cheese Wedge	96/cs	case	\$	2	\$
271	Pizza, Pepperoni Wedge	96/cs	case		5	
290	Pizza, Pan, Cheese	72/cs	case			
295	Pizza, Sausage, Wedge	96/cs	case			
647	Potatoes, Curly	6/4#	bag			
648	Potatoes, Crispy	6/4#	bag			

Exhibit 6.10. Some Decisions to be Made About Inventory

- 1. Should broken cases be counted in the inventory?
- 2. Should food in process of being prepared be counted?
- 3. On what date should the inventory be taken in order to close out the records at the end of each month?
- 4. If delivery arrives as inventory is being taken, will it be included? If so, how?
- 5. Which price will be used in determining value?
- 6. How will products that have been discarded be shown?

Turnover of Inventory—Turning over inventory two to three times per month is recommended by the industry. This may not be feasible or cost-effective for small schools. In order to determine the turnover rate and the number of days of inventory on hand, the method shown in Exhibit 6.11 is used. A supervisor/director will find the number of days in inventory useful when judging the amount of inventory in the central warehouse and in individual schools.

Exhibit 6.11. Determining Number of Days of Inventory and Inventory Turnover Rate

A.	Divide month's food cost by number of serving days in month, to determine daily foo	od cost.
	Food Cost \$ <u>13,570</u> ÷ No. Days <u>20</u> = Daily Food Cost \$ <u>678</u>	2.50
B.	Divide ending inventory by daily food cost——the answer is number of days inventor	ory in stock.
	Ending Inventory \$ 7,020 ÷ Daily Food Cost \$ 678 = No. Days	10_
C.	Example:	
	If 10 is the answer, the inventory turnover rate is twice a month (if 20 serving days i or every 10 days; or use the following formula:	n the month)
	20 ÷ No. Days <u>10</u> = Inventory Turnover Rate <u>2</u>	
	e beginning inventory was \$8,500, the ending inventory is \$7,895, and the purchased f	and during the
mont	th cost \$19,890, how much was the food cost for the month?	ood during the
<u>\$ 8,5</u>		ood during the
\$ 8,50	th cost \$19,890, how much was the food cost for the month? 500 + 19,890 = \$28,390 - 7,895 = \$20,495 Food Cost for Month	ood during the
\$ 8,50 If the	th cost \$19,890, how much was the food cost for the month? 500 + 19,890 = \$28,390 - 7,895 = \$20,495 Food Cost for Month ere were 19 serving days in the month, what is the average daily food cost?	ood during the
\$ 8,50 If the \$2	th cost \$19,890, how much was the food cost for the month? 500 + 19,890 = \$28,390 - 7,895 = \$20,495 Food Cost for Month ere were 19 serving days in the month, what is the average daily food cost? 20,495 _ 19 = \$1,079 Average Daily Food Cost	ood during the
\$ 8,5 If the \$2 How	th cost \$19,890, how much was the food cost for the month? 500 + 19,890 = \$28,390 - 7,895 = \$20,495 Food Cost for Month ere were 19 serving days in the month, what is the average daily food cost? 20,495 _ 19 = \$1,079 Average Daily Food Cost The many days of food are in inventory?	

Exercise:

Using Form 6.7 determine your daily food cost, number of days of inventory, and number of turnovers in inventory.

Form 6.7 Determine Number of Days of Inventory and Inventory Turnover Rate

A.	Divide month's food cost by number of serving days in month, to determine daily food	l cost.
	Food Cost \$ ÷ No. Days = Daily Food Cost \$	
В.	Divide ending inventory by daily food cost——the answer is number of days inventor	y in stock.
	Ending Inventory \$ ÷ Daily Food Cost \$ = No. Days	
C.	Example:	
	If 10 is the answer, the inventory turnover rate is twice a month (if 20 serving days in or every 10 days; or use the following formula:	the month)
	20 ÷ No. Days = Inventory Turnover Rate	
\$	+ = \$ - = \$ Food Cost for Month	
If the	ere were 19 serving days in the month, what is the average daily food cost?	
\$	= \$ Average Daily Food Cost	
How	many days of food are in inventory?	
\$	\$ = Days	
What	at is the inventory turnover rate?	
	÷ = Turnovers	

DETERMINE THE COST OF A MEAL

All the major expenses that make up the cost of a meal have been discussed. Exhibit 6.12 provides a format and example for determining the total expenses for the day and in turn the cost of a lunch. Once the revenue (see Exhibit 6.12) and expenditures have been calculated, one can determine the percentage of cost for each line item by dividing the cost by the revenue. Also, the manager can determine if there is a profit or deficit. Use a form such as that in Form 6.8 to illustrate the cost and compare it with Exhibit 3.4.

Form 6.8 is provided for determining your expenditures for a day, which makes up the bottom part of a profit and loss statement. Module 3 provides the revenue portion of the profit and loss statement.

Exhibit 6.12. Sample Completed Exercise Showing Expenditures for a Day and Cost of a Lunch

TOTAL FOR DAY	% OF REVENUE ¹
\$ 674.00	100%
\$ <u>199.50</u> (a)	<u>29.6</u> %
66.50 (c)	10.0 %
N/A 	<u>0.0</u> %
\$ <u>266.00</u> (g)	39.5 % (h)
\$ <u>262.50</u> (I)	<u>38.9</u> %
49.00 (k)	7.3 %
\$ <u>311.50</u> (m)	46.2 %
\$ <u>31.50</u>	4.7 %
\$ <u>.60</u>	
4.00 (r)	
4.55 (s)	
32.20 (t)	
70 	
42.05 (v)	6.2 % (w)
\$ <u>651.05</u> (x)	<u>96.6</u> %
\$ 22.95	%
	\$ 674.00 \$ 199.50 (a) 66.50 (c) N/A (e) \$ 266.00 (g) \$ 262.50 (l) 49.00 (k) \$ 311.50 (m) \$ 31.50 (o) \$ 4.00 (r) 4.55 (s) 32.20 (t) -70 (u) 42.05 (v) \$ 651.05 (x)

Percent is arrived at by dividing cost or expenditures by total revenue for a day.

Exhibit 6.12. Exercise Completed Showing Expenditures for Day and Cost of a and Cost of a Lunch (continued)

TOTAL MEAL EQUIVALENT FOR DAY		
90 # Breakfast ÷ 3 (A1)	=	$\frac{30}{a^1}$
\$\frac{110}{(B1)} A la Carte \div \\$3	=	36.6 b ¹
Lunch (C1)		$\frac{250}{c^1}$
TOTAL EQUIVALENT MEALS		316.6 d ¹
TOTAL EXPENDITURES FOR THE DAY		\$ <u>651.05</u> (x)
Divided by Total Meal Equivalent (c ²)		316.6 d ¹
COST OF PRODUCING AND SERVING A LUNCH $(x \div d^1 = e^1)$		\$ <u>2.06</u> e ¹

NOTE: If a substitute had been used, the meal cost would be greater. Figure the cost using a 3-hour substitute at \$5.50 per hour. What would the cost be per meal?

Example: $$651.05 + $16.50 = $667.55 \div 316.6 \text{ MEQ} = 2.11

Form 6.8. Expenditures for Day and Cost of a Lunch

Form 6.8. Expenditures for Day and Cost of a Lunch		
CATEGORY	TOTAL FOR DAY	% OF REVENUE
REVENUE (1)	\$ (2)	100% (3)
Labor (provided by Central Office)	\$	(b)
Fringe Benefits (provided by Central Office)	©	(d)
Substitute Labor Number hours x Rate of pay =	(e)	(f)
TOTAL LABOR COST	\$ (g)	(h)
Food Used:		
Purchased (see Production Record)	\$	(j)
USDA Commodities (see Production Record)	(<u>k</u>)	(I)
TOTAL FOOD COST	\$ (m)	(n)
TOTAL DISPOSABLES AND SUPPLIES	(o)	(p)
Other Costs:		
Telephone	(q)	
Trash Removal	<u>(r)</u>	
Miscellaneous Cost	(s)	
Direct (provided by Central Office)	(t)	
Indirect (provided by Central Office)	(u)	
TOTAL OTHER COST	(v)	(w)
TOTAL EXPENDITURES (Add together g + m + o + v = x) or Total Expenditures	(x)	(y)
PROFIT OR (LOSS) (Revenue less Expenditures)	\$	

Form 6.8. Expenditures for Day and Cost of a Lunch (continued)

TOTAL MEAL EQUIVALENT FOR DAY		
# Breakfast ÷ 3	=	a ¹
\$ A la Carte ÷ \$3	=	$b^{\overline{1}}$
Lunch (C1)		$c^{\overline{1}}$
TOTAL EQUIVALENT MEALS		$d^{\overline{1}}$
TOTAL EXPENDITURES FOR THE DAY		\$ (x)
Divided by total meal equivalent (c ²)		$d^{\overline{1}}$
COST OF PRODUCING AND SERVING A LUNCH $(x \div d^1 = e^1)$		\$

NOTE: If a substitute had been used, the meal cost would be greater. Figure the cost using a 3-hour substitute. What would be the per lunch cost?

Production Record with Postcosting of Food

1. Date	2. Offer Versus Serve Yes No									
3. MENU										
	Oven Fried Green Bean Mashed Pot	Chicken s atoes	0	Peaches Mixed Fruit range Juice			I N	Rolls Milk		
	4.	5.	6.	7. PLAN # Portions/Si	NED ze Portions	8.	9.	10.	11.	
	Foods Used	Yield From FBG or CAN	USDA Foods	GR III	GR IV	Amount Prepared	Left Over and/or Extra Sales	Cost per Unit	Cost per Menu Item	
MILK ½ pt		½ Pints Available 400								
MEAT/MEAT ALTERNATE Grades K-3 1½ oz Grades 4-6* 2 oz	Chicken, Whole, Cut-up	2.85 (2 oz)			450/2 oz	160 lbs				
VEGETABLES/ FRUITS	Green Beans, Canned	22.65 (½ c)			200/1/2 c	9 #10				
(2 or more) Grades K-3 ½ c	Mashed Potatoes Peaches,	Granl. 25.25 (½ c) Diced 24.35			250/1/2 c 50/1/2 c	10 lbs 2 #10				
Grades 4-6* 3/4 c	Canned Fruit Cocktail, Canned	(½ c) 23.45 (½ c)			50/1/2 c	2 #10				
	Orange Juice	IPP (4 oz)			100/3/8 c	100				
GRAIN BREADS 12 servings per week	Rolls	Recipe A			600/2 oz	600				
OTHER FOODS	USDA Honey					10 lb				
12. Reimbursable n	eals served:			13. Nonreim	bursable meal	ls served and ex	tra food sold:			
GR III (K-3) GR IV (4-12) *Total Reimbursable Meals **Useable ***Not Reused				Extra Sa Adult/M	ales (Menu Ite ales (Non-Men lisc. Meals enue Meals luded)		TOT.	AL MEALS	or <u>\$.</u> Each Lunch	

FBG = Food Buying Guide
GR = Group
C = Cup

CN = Child Nutrition K = Kindergarten # = Number

MODULE 7

REDUCING FOOD COSTS

CONTENTS

Reducing Food Costs

Eliminate Theft

Reduce Other Costs

OBJECTIVES OF MODULE 7

Participants will be able to:

- Identify ways of reducing food costs
- · Determine ways to lower price paid for food
- Enforce portion control
- Improve inventory control and ordering process
- Improve preparation procedures
- Plan less expensive menus
- Involve all employees in reducing costs
- See importance of supervising cost reduction
- Identify potential theft and ways of eliminating the opportunities
- Identify other ways of reducing costs

MODULE 7

REDUCING FOOD COSTS

When school foodservice (SFS) revenue does not cover the expenditures, the foodservice director must find ways to reduce costs and/or increase revenue. Increasing revenue is discussed in Module 10. Reducing costs without reducing quality should be the goal. In most cases this means reducing waste and becoming more efficient. Since food and labor costs make up the largest expenditures, analysis of the problem should start with those costs.

No more than 40 to 44 percent of the revenue can be spent for food (including the value of commodities) in order to break even financially . Restaurants generally spend no more than 38 to 39 percent of their revenue for food. If food costs in an SFS operation exceed 40 to 44 percent, different ways to reduce those costs should be studied and listed.

Some ways to reduce food costs are:

Lower the Price Paid for Food

- Buy on competitive bids; obtain quotes from a minimum of three companies. (Exhibit 7.1 shows price quotes obtained from three produce companies.)
- Initiate cooperative purchasing arrangements.
- Consider other creative ways of reducing prices paid. "Cost plus fixed fee" purchasing may be costeffective; however, the process must be administered carefully to:

Keep purveyors honest

Verify some prices charged

Check prices paid with what other school districts using fixed-price are paying

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Exhibit 7.1. Produce Price Quotes

		BRIDGE	S PRODUCE	RUSSELL PRODUCE		KEANY	PRODUCE
ITEM (1)	QUANTITY (2)	Each (3)	Total (4)	Each (5)	Total (6)	Each (7)	Total (8)
Apples, 125 ct red delicious	5 cs	\$12.75	\$ 63.75	\$17.20	\$ 86.00	\$18.40	\$ 92.00
Apples, 175 ct red delicious	20 cs	\$16.80	336.00	\$15.40	308.00	\$16.00	320.00
Bananas, 150 petite	20 cs	\$19.50	390.00	\$15.60	312.00	\$13.40	268.00
Broccoli, cs	8 cs	\$11.25	90.00	\$10.60	84.80	\$ 8.30	66.40
Cabbage, 50 lb green/white	4 cs	\$10.50	42.00	\$ 9.90	39.60	\$ 9.50	38.00
Carrots, 50 lb	4 cs	\$13.12	52.48	\$11.50	46.00	\$10.95	43.80
Carrots, 1 lb cello pack	18 lb	\$ 0.33	5.94	\$ 0.33	5.94	\$ 0.34	6.12
Cauliflower, head	15 hd	\$ 1.25	18.75	\$ 0.98	14.70	\$ 0.95	14.25
Grapes, lb red/white seedless	80 lb	\$ 1.00	80.00	\$ 0.82	65.60	\$ 0.82	65.60
Kale, lb	19 lb	\$ 0.50	9.50	\$ 0.55	10.45	\$ 0.60	11.40
Lettuce, 24 head	8 cs	\$15.62	124.96	\$13.70	109.60	\$11.33	90.64
Lettuce, head	10 hd	\$ 0.67	6.70	\$ 0.62	6.20	\$ 0.57	5.70
Oranges, 138 ct	25 cs	\$14.37	359.25	\$11.33	283.25	\$ 8.62	215.50
Radishes, cello bag	40 bg	\$ 0.20	8.00	\$ 0.25	10.00	\$ 0.22	8.80
Spinach, 10 oz cello bag	16 bg	\$ 1.12	17.92	\$ 1.10	17.60	\$ 1.10	17.60
Tomatoes, cs	8 cs	\$27.10	216.80	\$25.40	203.20	\$23.70	189.60
TOTAL			\$1,822.05		\$1,602.94		\$1,453.41

Abbreviations:

cs = case ct = count lb = pound

hd = head

oz = ounce

bg = bag

• Reduce number of deliveries required; and reduce number of vendors bought from by grouping foods in large aggregates. Each delivery stop a company has to make costs the company. When a district reduces costs of a company doing business, the prices charged should be better on the next bid.

- Buy in the largest quantities practical.
- Specify quality needed (e.g., Grade A peach are not needed for cobblers).slices
- Specify generic products and be careful of limiting competition by specifying brands.
- Accept no freebies from companies (favors, gifts, dinners, etc.).
- Pay bills more frequently and take advantage of discounts for fast payment.
- Compare prices paid with what other school districts pay on an annual basis.
- Check in deliveries carefully; check prices and extensions of prices (multiplication of quantity by price).
- Check count used for apples, oranges, etc.(may be possible to use 138 or 175 count instead of 125, which reduces portion cost); similar savings may be possible with other foods.
- Avoid custom-made foods when possible.

Use Less Expensive Ingredients

- Use soy concentrate and soy isolates as a substitute for up to 30 percent of beef, pork, poultry, and fish in recipes. Exhibit 7.2 shows a recipe using less expensive ingredients, dry beans and soy concentrate. This not only reduces costs, but reduces fat.
- Use ground turkey as substitute for up to 50 percent of ground beef in recipes, which usually reduces fat and costs.
- Increase use of dried beans and peas as protein sources.
- Replace portion-packed items (catsup, mustard) with bulk items if less expensive. Carefully compare the costs and usage.

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Exhibit 7.2. Recipe Using Less Expensive Ingredients

CHILI CON CARNE

Yield: 100 Portions Portion: (K-3) #8 Disher (4-12) #6 Disher

		RTIONS es K-3		RTIONS es 4-12	FOR — PORTIONS		
INGREDIENTS (1)	Weight (2)	Measure (3)	Weight (4)	Measure (5)	Weight (6)	Measure (7)	DIRECTIONS (8)
Ground Beef,*	7 lb 8 oz		10 lb				Brown meat; drain.
Flour, All Purpose	3 oz	3/4 cup	4 oz	1 cup			Make paste of flour and water; add to meat, stirring
Water		3/4 cup		1 cup			constantly.
Kidney Beans, Canned, <u>Drained</u>	18 lb 12 oz	3 gal	25 lb	4 gal			3. Add beans, salt, chili powder,
Salt		1/4 cup		1/3 cup			onions, tomato
Chili Powder		1/4 cup + 3 1/3 Tbsp		½ cup + 2 Tbsp			paste, and water to meat mixture; simmer for one
Onions, Dry	2 oz	2/3 cup	3 oz	1 cup			hour. Internal temperature
Tomato Paste		3 qt		1 gal			must reach 160° F.
Water		3 qt		1 gal			
Bowl, 8 oz		100		100			4. Portion into bowl for service.
*Use 20% Soy Concentrate Conversion: Ground Beef Soy Concentrate Water	6 lb 11 oz 1 2/3 cup		8 lb 14 oz	2 1/4 cup			

One serving provides under Food-Based Menu Planning:

Abbreviations:

lb = pound

oz = ounce

gal = gallon Tbsp = tablespoon

Have Good Portion Control and Reduce Plate Waste

- Use "offer versus serve" regulations at all school levels.
- Vary portion sizes, using smaller portions for kindergarten through third grade, if feasible.
- Use correct portion needed to meet meal requirement.
- Survey and compare yield of products, e.g., french fries at different schools in district.
- Pre-portion food when possible.
- Use correct measuring utensils.
- Use container to control portions, e.g., paper bag for french fries, as used by McDonald's.
- Encourage students to take only what they will eat.
- Cost out self-service bars. (If more costly than thought, charging by the pound/ounce and weighing foods selected may be a solution.)
- Discontinue meals at no charge to any who do not qualify, e.g., custodians and principal. Discourage "tasting" and "sampling" by other than person preparing food or manager.
- Train employees on portion control.

Serve Only Components of Meal Pattern as Part of Meal

- Serve desserts as part of menu only when they contribute to the meal pattern, e.g., chilled fruit cup or apple pie.
- Sell desserts as "extras"; remove from meal menu.
- Sell "treats" that go with a menu as "extras," e.g., potato chips.
- If "fillers" are needed, use less expensive items or bonus commodity items, e.g., rice, pasta.
- Control quantity of condiments taken, e.g., catsup. Hand out at cash register or place on serving dish
 with the food.

Control Inventory

- Store food properly and rotate stock—first in first out (FIFO).
- Avoid food spoilage, often caused by over-ordering, improper storage, and ordering too far ahead.
 (Controlling inventory is discussed further under "Eliminating Theft," which follows in this section.)

Improve Ordering Process

- Order by menu and use production records for history of usage.
- Verify receipt of what was ordered and delivered e.g., weigh, count, and measure items.
- Order produce at appropriate time and in needed quantities.
- Route all orders through central office whereby the director or supervisor can check orders.

Improve Preparation Procedures

- Adjust recipes for portions needed, e.g., do not prepare 200 portions if 175 portions are needed.
- Use timer to avoid overcooking.
- Check recipe yields.
- Batch-cook food as needed.
- Store leftovers immediately after service and plan when they are to be used.
- Reduce holding time of food after cooking.
- Reduce food waste during preparation.

Use the good parts of a piece of fruit that has a spot on it.

Avoid trimming too much away when preparing fresh fruits and vegetables.

Utilize parts that may otherwise be food waste, e.g., stalks of broccoli peeled, trimmings from slicing ham, and salad bar leftovers use in soup (when appropriate).

Use spatula to scrape bowls and cans.

Use over-ripe bananas in baked items or in gelatins.

•Train employees in proper preparation procedures.

Plan Less Expensive Menus

- Precost and postcost recipes and menus.
- Know cost per portion for each food item and use less expensive foods to bring a menu in line with standards.
- Use fresh foods in season.
- Remove slow-moving menus, ones that yield low participation.
- Increase multi-use items, e.g., tomato sauce that can be used for making spaghetti, lasagna, and ravioli, and put over meat ball subs; a chili that can be used as soups, on nachos and taco salads, etc.

Involve All Employees in Reducing Costs

- Discuss profit and loss with employees.
- Put cost per can/box on items in storeroom and refrigerator/freezer.
- Cost food used daily and consider how costs could be reduced.

Supervise Cost Reduction

- Put a small can (rather than a large can) in middle of kitchen to collect all food waste. Check food waste in kitchen, as well as plate waste in trash cans.
- Use history to forecast quantities needed closer to number served.
- Compare purchases made by similar size schools—e.g., bread bill, produce bill—and break the
 purchases down when they differ greatly.
- Compare production record quantities used with number served.
- Compare food costs from month to month by category, e.g., dairy, ice cream, produce, bread, meats, frozen food products. Determine what percent of food dollar each is taking; how it varies from other schools' purchases.

Check Pricing and Costs

- Determine how much the self-service salad bar, deli bar, etc., are really costing—for food and labor compared with revenue; consider selling a la carte by weight and not fixed price. (In the latter case, the salad and deli bars would not qualify for a meal, unless a preset quantity is established as a meal, e.g., 8 ounces.)
- When precosting, add a "handling" factor or a "waste" factor to get a more realistic cost.
- Check prices charged for a la carte foods.

Use USDA Commodities More Effectively

• Check value of commodities received last year. If the value did not equal entitlement, determine what could be done to improve usage.

- Plan menus to utilize USDA commodities. However, do not allow commodities to reduce participation by serving unpopular foods.
- Use state and/or National Commodity Processing (NCP) contracts when cost-effective; apply for rebates.
- Use USDA commodity foods as stingily as you would purchased foods.
- Trade USDA commodities you cannot use with neighboring school district if possible.

Exercise:

Using the following menu (shown in Form 7.1), determine how you could reduce the cost.

Form 7.1. Reducing Cost of a Menu

MENU ITEMS	PRESENT COST ³⁴	REDUCED COST	CHANGES MADE
Ham and Cheese on Croissant			
Tomato Soup/2 Packages of Crackers			
Packets of Mayonnaise and Mustard			
Fresh Apples or Sliced Peaches			
Milk of Choice			
TOTAL			

ELIMINATE THEFT

Foodservice directors and managers might not want to admit that their employees, customers, others in the school building, and distributors could be stealing from them. Carl Klump, president of the Chicago Professional Polygraph, told the National Restaurant Association in 1990 that "40 percent of all employees in any business can be expected to steal." Most are borderline, but "17% are classified as significantly dishonest." Admitting this could be a problem; the best approach is to eliminate the opportunities for stealing. The following are some possible ways of helping:

 $^{^{34}\}mbox{See}$ Form 6.2 in Module 6 for present cost.

Customer Theft

- Locate cashier at exit, but where she or he can see the entire line.
- Train staff to watch customers.
- Do not cash checks. Accept checks only for amount of purchase or in amount of prepayment.
- Request that heavy coats be left outside the serving area.
- Put prepackaged a la carte items where cashier hands items to students as payment is received.
- If SFS operates vending machines, be sure a secure lock system is on them. The locks that come on machines may be universal locks, whereby anyone with a key to that brand vending machine can open your machines.

Employee Theft

- Do not allow "leftovers" to be taken home. The practice of allowing leftovers to be taken home is a violation of federal regulations.
- Know what is in the storeroom and refrigerator and freezer at end of day, so that if items are taken, they will be missed.
- If there is possibility of others having keys to storeroom, etc., change locks.
- Maintain low inventory by ordering only what is needed. Turn over inventory every two weeks.
- Reduce number of items in inventory; consider mixes—e.g., spaghetti sauce spice mix—which eliminate a need for having many spices on the shelf. Do cost comparisons before making changes.
- Keep perpetual inventory of items in warehouse.
- Keep perpetual inventory of high-price items stored at the school level.
- Date products as delivered.
- Keep storeroom locked, as well as back door. Have policy that all ingredients are to be obtained from storage during short period of time in mornings.
- Do not open cases in storeroom until ready to use. Open cases are harder to inventory and missing cans are not as obvious as missing cases.
- Request that employees do not bring large bags to work.
- Have money counted by two or more people in an enclosed place.
- Store change fund and supply of meal tickets in school safe at night.
- Do not allow one person to handle all the records and counting of money.

• Inventory quantity available for sale and what is left daily to determine how much was stored. Check the amount of money taken in with what should have been taken in. See example of comparing quantity available to amount sold in Exhibit 7.3.

Distributor Theft

- Do not give keys to delivery people.
- Do not allow early morning deliveries to be left on loading dock before anyone is available to sign for the products delivered and properly store them.
- Check food and supplies when delivered. If dated products, check dates. Weigh items that are sold by
 pound; count items that are sold by count. Check products against specifications to determine whether
 correct products are being delivered. Require delivery tickets to be signed by authorized person before
 they will be paid and require all deliveries to be checked before signing.
- Check prices charged to determine if they are correct. Check the multiplication in extending prices and addition on the delivery tickets.
- Compare delivery tickets and bills.

Exhibit 7.3. A la Carte Accountability

TO BE COMPLETED FOR A LA CARTE ITEMS

ITEM (a)	CASH REG. KEY (b)	NUMBER FOR SALE (c)	NUMBER LEFT (d)	NUMBER SOLD (e)	PRICE (f)	DOLLAR VALUE (g)
Grilled Cheese Sandwich	24	50	5	45	\$1.00	\$ 45.00
Peanut Butter & Jelly Sandwich	24				\$1.00	
A la Carte Entree	10	3	1	2	\$1.15	2.30
Cookie, 2/pkg	21	50	4	46	\$.30	13.80
Cookie, Large	40	20	2	18	\$.50	9.00
Cookie, Single	24	25	3	22	\$.25	5.50
Donut	24				\$.50	
Pretzel	8	40	7	33	\$.45	14.85
Pudding w/Cream	31				\$.50	
Popcorn	27	50	6	44	\$.60	26.40
Brownie/Cake	18				\$.65	
Skinny Dipper	29				\$.55	
Ice Cream	19	35	0	35	\$.50	17.50
Fruit Vegetable	14	8	0	8	\$.50	4.00
Large Salad w/o Protein	24	2	1	1	\$.85	.85
Small Lunch Salad	24				\$.65	
Lemonade	24	40	1	39	\$.60	23.40
Milk	16	70	7	63	\$.35	22.05
Juice	22	2	0	2	\$.40	.80
Coffee/Tea	24				\$.50	
Sipp	25	15	1	14	\$.50	7.00
Abbreviations: reg = register				Total A la (h)		\$ 192.45

To determine $number\ sold\ (e)$, subtract $number\ left\ (d)$ from $number\ for\ sale\ (c)$. To determine dollar value (g) for each a la carte item sold, multiply $number\ sold\ (e)$ by the $price\ (f)$. To arrive at $total\ a\ la\ carte\ (h)$, add $dollar\ values\ (g)$ together.

If an employee takes the money to the bank each day, it should be carried in a locked bank bag inside another disguised bag. The time of day and the direction that is traveled should be varied. Precautions should be taken by the employee when leaving the school building and at the bank when making the deposit.

REDUCE OTHER COSTS

Though the other costs usually do not consume much of the revenue, all costs should be scrutinized for ways to reduce spending. There are many places to look in order to reduce costs.

• Reduce costs of disposables—paper and plastics.

- Control how many napkins, etc., customers take.
- Consider using prepackaged napkins, straws, forks, and/or spoons. Do not put out eating utensils that are not needed, e.g., knives and teaspoons, when only forks are needed. Do not place silverware or plasticware at the beginning of the serving line. Place these items at the end.
- Compare costs of using permanent-ware and dishwashing with using disposable products.
 See Exhibit 5.2 for a comparison of disposable products and dish washing. (Concerns for ecology may prevent the use of disposable products; however, recycling may be an acceptable compromise.)

• Reduce laundry service costs.

- Compare prices of disposable towels to costs of laundry services.
- Compare costs of a clothes washer and dryer, labor, and detergents with cost of using a laundry service.

MODULE 8

BREAKEVEN POINT

CONTENTS

Determine the Breakeven Point

When Breakeven Point is Higher than Revenue

Determine the Breakeven Point for Franchise

Breakeven Point for Products Purchased Outside

Use the Breakeven Point

OBJECTIVES OF MODULE 8

Participants will be able to:

- Determine fixed cost
- Determine variable cost and contribution margin
- Determine breakeven point
- Use breakeven point as a management tool and motivator
- Set goals for individual schools

MODULE 8

DETERMINE THE BREAKEVEN POINT

The **breakeven point (BEP)** is the ultimate determiner in knowing the daily financial situation, particularly when the director/manager establishes the BEP and sets goals to meet that point. This can be done for a school district and by school. In some cases one may decide that it is impossible to break even at some school locations, because the revenue will not cover the basic operating costs.

The following formula can be used to determine the BEP:

If daily FC is \$400 and VC is 51%, what is the CM? What is the BEP?

Fixed costs (FCs) are the costs that do not vary with the day-to-day or week-to-week volumes of sales or numbers of customers served, e.g., manager's salary, maintenance cost. The most common FC items are:

- Central office cost
- Manager's salary
- Basic telephone charge
- Core staff
- Trash removal (unless by weight)

If the school district or school determines what profit they want to make, the profit would be added to the fixed cost.

Variable costs (VCs) are the costs that vary in direct proportion with volumes of sales or numbers of customers served, e.g., food, some supplies, and some labor. VCs are those costs that increase and decrease in direct ratio to the sales. Most common VC items are:

- Food
- Supplies, paper goods
- Some labor (that is, if numbers of hours are adjusted according to numbers served or amount of revenue)

Contribution margin (CM) is the percent of the revenue that can be used to pay the FC. In other words, if the CM is 49 percent, then 49¢ of every dollar in revenue goes to paying the FC (manager's salary, indirect costs, etc.).

The BEP is the amount of sales (revenue/income) needed to cover the fixed costs and variable costs. It is that point where total revenues and total expenses are equal. Any sales beyond that point will provide some profits. When the revenue does not reach that BEP or surpass it, the operation will have a loss (deficit).

If only 49ϕ of every dollar in revenue goes to paying the FC, and the FC is \$300 per day, how many dollars in revenue are needed to pay the FC? Or, what is the BEP?

Exhibit 8.1 shows how to arrive at the BEP for a high school. Form 8.1 provides an exercise in arriving at the BEP for another school. Note that the easiest way to determine revenue per day is to use former data, including point-of-sale information. However, if this information is not available, one may arrive at the revenue by using data arrived at in Module 3.

Exhibit 8.1. Determining the Breakeven Point Example

Mackay High School serves 750 student and 20 adult lunches each day and sells \$300 of a la carte items. The manager's salary is \$630 every two weeks, manager's fringe benefits \$157.50, \$12 per month for telephone, staffed with core of 50 hours per day at \$7 per hour and 25 percent fringe benefits, substitute and part-time employee wages/costs are 6.7 percent, \$60 per month for trash removal, \$4,000 per month indirect cost (central office, etc.). Thirty percent of the meals are free and five percent are reduced-price. Lunch prices are \$1.50 for paying students, \$2 for adults, and 40ϕ for reduced-price students. Food cost is 44 percent of revenue. Paper and supplies are 6 percent.

ITEM (1)	\$ (2)	% (3)	FC (\$) (4)	VC (%) (5)
Revenue for Day	\$1,661.87	100.0%		
Food Cost		44.0%		44.0%
Labor Cost for: Manager Benefits Core Staff Benefits	\$ 63.00 \$ 15.75 \$ 350.00 \$ 87.50	31.1%	\$516.25	
Indirect	\$ 200.00	12.0%	200.00	
Other Labor Costs		6.7%		6.7%
Telephone	\$.60		.60	
Trash Removal	\$ 3.00	0.2%	3.00	
Paper/Supplies		6.0%		6.0%
Total Cost			\$719.85	57.0% ³⁵

Reduce food cost by 2 percent and check BEP and note the results.

³⁵Rounded up.

Exercise:

Using Form 8.1, find the BEP for Humes Senior High School, which serves 500 student and 20 adult lunches each day and sells \$400 a la carte items giving a revenue of \$1,301.74. The manager's salary is \$960 every two weeks, manager's fringe benefits \$288, staffed with core of 43 hours per day at \$7 per hour and 25 percent fringe benefits—a total of \$501.05 per day. Substitute and part-time wages are 5 percent, \$30 per month for trash removal, \$12 per month for telephone, \$4,000 per month indirect cost (central office, etc.). Thirty percent of the meals are free and five percent are reduced-price. Lunch prices are \$1.25 for paying students, \$2 for adults, and 40ϕ for reduced-price students. Food cost is 39 percent of revenue. Paper and supplies are 6 percent.

Form 8.1. Breakeven Point Analysis

Form 8.1. Breakeven Po	IIIt Allarysis	1		1
ITEM (1)	\$ (2)	% (3)	FC (\$) (4)	VC (%) (5)
Revenue for Day		100%		
Food Cost				
Labor Cost for: Management Benefits Core Staff Benefits				
Indirect				
Other Labor Costs				
Telephone				
Trash Removal				
Paper/Supplies				
Total Cost				

How can BEP be decreased?

Form 8.1 completed is shown below.

Form 8.2. Completed Exercise of Breakeven Point Analysis

ITEM (1)	\$ (2)	% (3)	FC (\$) (4)	VC (%) (5)
Revenue for Day	\$ 1,301.74	100%		
Food Cost		39%		39%
Labor Cost for: Management Benefits Core Staff Benefits	96.00 28.80 301.00 75.25		\$ 501.05	
Indirect	200.00		200.00	
Other Labor Costs		5%		5%
Telephone	.60		.60	
Trash Removal	1.50		1.50	
Paper/Supplies		6%		6%
Total Cost			\$ 703.15	50%

\$ 703.15 FC (+ Profit \$25)	= \$ 1,406.30 BEP without profit
100% - <u>50 %</u> VC = <u>50 %</u> CM	or \$1,456.30 BEP with profit

How can BEP be decreased?

WHEN BREAKEVEN POINT IS HIGHER THAN REVENUE

If the BEP is higher than is possible to reach, the options are to subsidize the school food service program or do one or more of the following:

Reduce FC—reduce fixed cost, e.g., reduce manager's salary, trash removal, or telephone

Reduce VC—lower percentage of revenue used for food, extra labor, supplies and paper

Increase revenue—increase number of lunches served and services offered (e.g., add breakfast program) without increasing FC

Modules 5 and 7 discussed ways to reduce costs, and Module 10 will discuss ways to increase revenue.

Show ways you can increase revenue and reduce cost and in turn reach or exceed the breakeven point.

DETERMINE THE BREAKEVEN POINT FOR FRANCHISE

Exhibit 8.2 illustrates a franchise arrangement and the breakeven point. It is important to determine how much product will have to be sold to break even.

Exhibit 8.2. Sample Franchisee's Breakeven Point

START UP COST OF \$ 4,500

PRORATED OVER 3 YEARS \$8.80/Day (170 SERV. DAYS)

12% FRANCHISE FEE ON ALL SALES

REQUIRES 2 PEOPLE, 3 HOURS EACH, PREPARING, SERVING, CLEANING
FOOD COST of 32% - 34%

ITEM (1)	FIXED COST (2)	VARIABLE COST (3)
Start Up Cost	\$ 8.80	
Food Cost		34.0%
Paper Supplies/Detergents		5.0
Franchise Fee		12.0
Labor Cost @ \$15.88/Hr	95.28	
Overhead		7.5
	\$ 104.08 FC	58.5% VC

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¹ Should use actual number of days service is provided.

Form 8.3 can be used to determine the breakeven point for your franchise arrangement.

Form 8.3. Franchisee's Breakeven Point

START UP COST	Γ OF \$				
PRORATED OV	ER 3 YEARS	\$	/Day (SERV. D	DAYS)
% Fl	RANCHISE F	EE ON ALL	SALES		
REQUIRES	_ PEOPLE, _	HOUR	S EACH, PRE	PARING, SERV	VING, CLEANING
FOOD COST of	% -	%			

ITEM (1)	FIX	XED COST (2)	VARIABLE COST (3)
Start Up Cost	\$		%
Food Cost			
Paper Supplies/Detergents			
Franchise Fee			
Labor Cost @ \$/Hr			
Overhead			
	\$	FC	% VC

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BREAKEVEN POINT FOR PRODUCTS PURCHASED OUTSIDE (AT RESTAURANTS)

Many schools are selling subs from Subway Restaurant and pizza from Pizza Hut or other similar situations.

The important thing to determine is the real profit. It may be less than what a sales pitch wants to lead management to believe. Costs to be added are labor for selling it, paper supplies and detergents, and a portion of overhead. Exhibits 8.3 and 8.4 illustrate the real profit from selling pizza. Form 8.3 may be used to determine your real profit from re-selling restaurant-made foods.

Exercise:

What is the breakeven point when you sell restaurant made pizza?

Pizza, cut 8, cost foodservices \$5.60 per pizza, and you sell it for \$1.25 per slice. Will you make a profit when you sell 25 pizzas? Could you charge \$1.00 per slice and still make a profit? How many pizzas do you need to sell to breakeven, if your overhead is 15ϕ per MEQ or 7.5% when sold at \$1.25/slice and 9.4% when sold at \$1.00/slice, and it takes one employee $1\frac{1}{2}$ hours to set up, sell, count money, and clean up; average salary is \$12.50 per labor hour (including fringe benefits) and paper supplies and other costs run 6%.

Revenue:

\$1.25 x 8 slices x 25 pizzas	=	\$250.00
Food Cost	=	56%
\$1.00 x 8 slices x 25 pizzas	=	\$200.00
Food Cost	=	70%

Exhibit 8.3 Breakeven Point for Pizza Sold at \$1.00 Per Slice and Fixed Cost is \$18.75

ITEM (1)	\$ (2)	% (3)	FC(\$) (4)	VC(%) (5)
Revenue	\$200.00	100.0%		
Food Cost	\$140.00	70.0%		70.0%
Labor Cost	\$ 18.75		\$ 18.75	
Overhead		9.4%		9.4%
Paper and Other Supplies		6.0%		6.0%
TOTALS			\$ 18.75	85.4%

 $\frac{\$ 18.75 \text{ FC}}{100\% - 85.4\%}$ VC = 14.6% CM = \$128.43 or 17 Pizzas

Exhibit 8.4 Breakeven Point for Pizza Sold at \$1.25 Per Slice and Fixed Cost is \$18.75

ITEM (1)	\$ (2)	% (3)	FC(\$) (4)	VC(%) (5)
Revenue	\$250.00	100.0%		
Food Cost	\$140.00	56.0%		56.0%
Labor Cost	\$ 18.75		\$ 18.75	
Overhead		7.5%		7.5%
Paper and Other Supplies		6.0%		6.0%
TOTALS			\$ 18.75	69.5%

 $\frac{$18.75 \text{ FC}}{100\% - 69.5\% \text{ VC}} = 30.5\% \text{ CM} = 61.48 or 7 Pizzas

USE THE BREAKEVEN POINT

The BEP can be a motivator for management and their staff if broken into usable information. Establish the BEP for each school. Determine how the BEP can be met. It may require a combination of

increasing revenue and decreasing expenditures, e.g., percent of revenue spent for food and supplies and the amount in dollars spent for labor. There may be instances when it is impossible to break even.

Below in Exhibit 8.5, the BEP has been translated into goals—number of breakfast, lunches and amount in dollars of a la carte/snack sales. The point-of-sale devices will probably provide sufficient information for breaking out the number of meals by serving line/cashier and amount of a la carte sales. If there is more than one serving line, breaking the goal and accomplishment can motivate servers and cashiers to increase speed of their lines and make accomplishing the goal a team effort.

Exhibit 8.5. Goal/Score Board

	GOAL BOARD											
CATEGORY	PRESEN T	GOAL	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Breakfast												
Lunch												
Full Lunch												
Line 1												
Line 2												
Line 3												
Line 4												
TOTAL												
A la Carte												
Snack Bar 1												
Snack Bar 2												
Other												

"WE CAN DO IT!"

MODULE 9 DEVELOPING A MEANINGFUL BUDGET

CONTENTS

Value of a Budget

Factors to Consider

Methods of Preparing a Budget

Plan a Budget

Evaluate and Adjust the Budget

OBJECTIVES OF MODULE 9

Participants will be able to:

- Appreciate the value of a budget
- Identify some factors to consider when planning a budget
- Understand the different approaches to planning a budget
- Plan a budget using the steps provided
- Evaluate and adjust the budget during the year

MODULE 9

A budget is a financial plan that projects the income, plans expenditures, and projects the outcome for a specific period of time. A school district may or may not require a budget for the school foodservice (SFS) program.

VALUE OF A BUDGET

A budget provides a guide for judging the outcome of a year. It helps when deciding if a price increase is needed and when expenditures need to be decreased. It also enables the SFS director to plan for large expenditures. Exhibit 9.1 lists some of the advantages.

Exhibit 9.1. Advantages of Budgeting

- Provides a written plan
- Identifies resources and costs
- Provides a control device
- Communicates goals to others
- Helps foresee problems
- Provides a yardstick for evaluating month-to-month financial situation

FACTORS TO CONSIDER

Factors to be considered when planning an annual budget are:

• **Historical data.** How many were served last year? How much did participation decrease when prices were raised the last time?

- **Economic indicators.** What percent has food cost gone up? How much of a raise are employees receiving?
- **Demographic changes.** Is enrollment increasing or decreasing?
- **Effects of menu changes.** Have menus been changed? Will this result in an increase in participation?
- **Changes in operating procedures.** By decreasing the number of on-site production kitchens, could labor costs be decreased?
- **Goals and plans.** How much is to be spent on uniforms? How much is to be spent on small equipment?
- Changes in state and federal subsidy and legislation.
 Will the state charge delivery cost for USDA donated commodities for the first time? How much will that cost be over a year?
- **Meal price changes.** Will a price increase be necessary? If so, how much? What will that yield?

METHODS OF PREPARING A BUDGET

Two common methods of planning a budget are "baseline" and "zero-based."

"Baseline" assumes that all the expenditures from last year were necessary and will be duplicated.

"Zero-based" requires starting with zero and figuring all expected revenue and expenses.

A combination of the two can be useful. However, there are some advantages in implementing zero-based budgeting rather than adding on to last year's budget. SFS is a changing program, and the ways the funds will be spent change often. There is a danger of using the baseline method year after year. If an error exists, a budget is being built based on an error. It is wise to check a baseline budget by going back to zero and building the revenue and expenses.

Another decision to be made when planning a budget is:

Will there be one budget for the district's SFS?

OR

Will each school or cost center have a budget with the total of all the SFS programs becoming the district budget?

When the budget is a centralized one for the total program, it is considered a "top-down" budget, probably the most frequently used in SFS. However, the decentralized approach, or a "bottom-up" budget, where each school's foodservice program has its own budget, has additional control mechanisms that can be effective. The manager and principal will see the budget, if realistic, as a school's goal and a plan. This is recommended if site-based management of school foodservices is used. It can be a gauge for the manager to use and for the director to use when evaluating financial management skills.

PLAN A BUDGET

Generally a budget is planned sometime during the school year before the school year the budget is to be in effect. The closer to the end of the previous school year the better, as more planning data is available. Regardless of whether the budget is a school's foodservice budget or the school district's budget, the same kind of information is needed. The steps to planning a budget are listed on the following page, Exhibit 9.2.

Exhibit 9.2. Steps to Planning a Budget

• Forecast revenue based on projected participation in the breakfast and lunch programs prices to be charged, a la carte sales expected, revenue from contracts, etc.

- Forecast the percentage increase in food cost.
- Determine if employees will receive a raise; the percentage increase in labor cost, especially fringe benefits.
- Project equipment needs and other expenditures.

These steps are illustrated in Exhibit 9.3.

EVALUATE AND ADJUST THE BUDGET

The budget can be used monthly to determine if expenditures and revenue have developed as planned. Since it is unlikely that the budget projections will all materialize as projected, it may be necessary to move money from one account to another. If additional equipment is needed during the year, money will need to be moved from another category in the budget. If labor or food costs are less than planned, the money can be moved from those categories.

The budget should be evaluated on a monthly basis, but movement of funds should be limited to once or twice during the year. A budget is a very useful tool for an SFS director. Ending the school year with an **unplanned deficit** should not happen, if the budget has been planned and followed carefully.

Federal regulations limit the school foodservice net cash resources to an amount that does not exceed three (3) months average expenditures, a letter of justification for excess funds and/or a reduction of funds plan must be submitted by the school food authority to the State Department of Education, School Nutrition Programs, for approval. The letter must detail the reason for the excess funds and the plan for the use and/or expenditure of the excess funds.

Exhibit 9.3. School Foodservice Budget

LION PUBLIC SCHOOLS BUDGET Fiscal Year 1994

	DGET FISCALTEAL	
REVENUE (1)	TOTAL (2)	PERCENT (3)
BREAKFAST: 18,000 Number Paying Elementary x \$.60 Price Charged 15,300 Number Paying Secondary X \$.60 Price Charged 13,500 Number Reduced Price x \$.30 Price Charged 7,000 Number Paying Adult x \$.95 Price Charged 33,300 Number Student Paid x \$.1875 Federal Reimbursement 13,500 Number Reduced Price x \$.6450 Federal Reimbursement 108,000 Number Free x \$.9450 Federal Reimbursement	\$ 10,800 9,180 4,050 6,650 6,188 8,708 101,849	
TOTAL REVENUE FROM BREAKFAST	\$ 147,425	7.4%
LUNCH: 432,000 Number Paying Elementary x \$1.00 Price Charged 243,000 Number Paying Secondary X \$1.25 Price Charged 27,100 Number Reduced Price x \$.40 Price Charged 19,800 Number Paying Adult x \$1.75 Price Charged 675,000 Number Student Paying x \$.1625 Federal Reimbursement 27,100 Number Reduced Price x \$1.2950 Federal Reimbursement 288,000 Number Free x \$1.6950 Federal Reimbursement 990,100 Number Reimbursable x \$.05984 State Reimbursement	\$ 432,000 303,750 10,840 34,650 109,688 35,095 488,160 59,248	
TOTAL REVENUE FROM LUNCH	\$1,473,431	74.3
OTHER REVENUE: A La Carte Sales Special Functions or Catering Interest USDA Donated Commodities USDA Commodity Rebates Other State Matching	\$ 142,200 28,000 4,200 103,000 ¹ 2,020 42,150 41,152	
TOTAL REVENUE FROM OTHER SOURCES	\$ 362,722	18.3
TOTAL REVENUE	\$1,983,578	100.0%
EXPENDITURES	TOTAL	PERCENT
FOOD COSTS (Including value of commodities used)	\$ 725,973 ¹	36.6%
SCHOOL STAFF: Wages and Salaries \$652,800 Fringe Benefits, Employer's Share 143,800 LABOR AND FRINGE BENEFITS	796,600	40.2
LABOR AND FRINGE BENEFITS CENTRAL OFFICE STAFF SALARIES	147,112	7.4
SUPPLIES, DETERGENTS, AND DISPOSABLES	95,264	4.8
SMALL EQUIPMENT AND OFFICE SUPPLIES	1,920	0.1
LARGE EQUIPMENT	52,060	2.6
OTHER OPERATING EXPENSES	44,209	2.2
TOTAL EXPENDITURES	\$1,863,138	93.9%

 $^{^1\}mbox{Value}$ of commodities may or may not be included as a revenue and as an expense.

Exercise:

Using your own school district's figures and Form 9.1, prepare a budget for the school year. When complete, calculate the percentages of revenue for comparison information.

Form 9.1. School Foodservice Budget

REVENUE (1)	TOTAL (2)	PERCENT (3)
BREAKFAST: Number Paying Elementary x \$ Price Charged Number Paying Secondary X \$ Price Charged Number Reduced Price x \$ Price Charged Number Paying Adult x \$ Price Charged Number Student Paying x \$ Federal Reimbursement Number Reduced Price x \$ Federal Reimbursement Number Free x \$ Federal Reimbursement		
TOTAL REVENUE FROM BREAKFAST		
LUNCH: Number Paying Elementary x \$ Price Charged Number Paying Secondary X \$ Price Charged Number Reduced Price x \$ Price Charged Number Paying Adult x \$ Price Charged Number Student Paying x \$ Federal Reimbursement Number Reduced Price x \$ Federal Reimbursement Number Free x \$ Federal Reimbursement Number Reimbursable Lunches x \$ State Reimbursement		
TOTAL REVENUE FROM LUNCH		
OTHER REVENUE: A La Carte Sales Special Functions or Catering Interest USDA Donated Commodities ¹ USDA Commodity Rebates Other State Matching		
TOTAL REVENUE FROM OTHER SOURCES		
TOTAL REVENUE		
EXPENDITURES	TOTAL	PERCENT
FOOD COSTS (Including value of commodities used) ¹		
SCHOOL STAFF: Wages and Salaries Fringe Benefits, Employer's Share LABOR AND FRINGE BENEFITS		
LABOR AND FRINGE BENEFITS CENTRAL OFFICE STAFF SALARIES		
SUPPLIES, DETERGENTS, AND DISPOSABLES		
SMALL EQUIPMENT AND OFFICE SUPPLIES		
LARGE EQUIPMENT		
OTHER OPERATING EXPENSES		
TOTAL EXPENDITURES		

¹Value of commodities may or may not be included as a revenue and as an expense.

Each year the planned budget should be compared to what actually happened. Comparing the current year's budget with the previous year's budget can be useful. Trends should be evident unless major changes have been made in the SFS program.

A budget is a projection for an enterprise fund (revolving fund or account), such as SFS, and it will need adjusting periodically. A quarterly review of the budget should be adequate. If funds have to be appropriated to pay bills, projections made at the end of the third quarter should provide adequate funds for paying the end-of-year bills.

MODULE 10

INCREASING REVENUE

CONTENTS

Increase Revenue

Raise Prices

Set A la Carte Prices

Increase Participation and Sales

Start a Breakfast Program

Begin a Catering Program

Provide Food for a Summer Foodservice Program

Provide Contracted Services

OBJECTIVES OF MODULE 10

Participants will be able to:

- Identify many ways available to increase revenue
- Determine when to raise prices charged
- Start a breakfast program that is cost-effective
- Set up a catering program as a business
- Identify the pros and cons of being a summer food service sponsor and a supplier of meals
- Determine when contracting to serve others is desirable

MODULE 10

INCREASE REVENUE

Increasing revenue as a means of breaking even financially and/or subsidizing the school district's foodservice program are viable options. There are both simple and more complex ways of doing each of these.

It is necessary to understand the financial side of management before taking on the additional "business." Otherwise, the deficit could grow instead of decrease. The problems of inefficiency, faulty purchasing practices, poor-quality food, non-service-oriented employees, inadequate accountability, and a poorly run program do not go away, but become compounded with the addition of more responsibility.

Before considering catering or expanding services beyond the typical school foodservice program, it is wise to be objective and answer some basic questions about taking on additional responsibility. One of the biggest questions is: Is the management of the present program capable of taking on more responsibility? To successfully do this, it is necessary to have a well-organized and well-trained staff—one that is in agreement that more responsibility is the way to go.

Certainly it may be easier to solve an over-staffing or high-labor-cost problem by increasing revenue than it is to reduce labor hours or eliminate positions. However, unless the increase in revenue is achieved with expenditures kept lower, it will not improve the situation. Sometimes greater volume is needed to afford the fixed costs, e.g., indirect charges, central office staff's salaries, and managers' salaries. Increasing volume is certainly a more positive way of improving the financial picture.

This module will describe some ways of increasing revenue.

RAISE PRICES

Raising meal prices is often the remedy that a school district tries in order to eliminate a deficit. This can be very shortsighted. It may mean pricing the program out of business. An analysis of the operation is needed to determine if it is the revenue side or the expenditure side that needs fixing. Often it is both. See Exhibit 10.1, which provides factors to be considered when making a decision about raising prices charged. Exhibit 10.2 lists a group of questions to use to help you examine your situation before raising prices.

Exhibit 10.1. Factors to Consider

Factors to be considered when increasing prices charged are:

- Costs of producing and serving the food
- Present prices charged and rates of reimbursements
- Economic situation at the time
- Reasons for needing to increase prices
- What competition charges--commercial and other nearby school districts
- When the price was last increased
- Whether the price increase can be justified publicly (in media)
- Whether reducing costs has been considered
- Reduction in participation or sales which usually follows price increases (discussed in Module 10)
- What the customer considers fair value

Commercial cafeterias and restaurants often base price on food costs and a markup factor. This is not recommended for SFS because labor costs may be greater than food costs. Instead, the total real costs should be used.

Exhibit 10.2. Questions to Ask before Raising Prices

Before raising prices, some questions need to be asked, and answered, such as:

• Are the prices charged really too low?

To find the answer to this will require some objective comparisons and evaluations.

• Can the customer afford to pay more?

The students may have money, but will they be willing to spend it on what the cafeteria has to offer?

- What are the alternatives for the customer?
- What is the competition charging?

 Is the customer getting a better value?

The quality of the school's food may be great, but the food offered may not be what students want, or the presentation may be boring and not appealing.

• How much will participation decrease if meal prices are increased?

A USDA study conducted in 1982 showed that participation in the school lunch program decreased one percent for every cent the price of lunch increased.

Other questions to be considered before raising prices are:

- Are prices fair value in the eyes of the customer?
- How much does each food cost? This is essential data to gather before setting or changing prices.
- Are other services provided, e.g., catering a football banquet function, below real cost? No service should be at the expense of the school lunch program.
- Do prices charged for all services outside the federally subsidized meal programs provide a profit?
- Will a decrease in participation result from raising the prices charged?
 Exhibit 10.2 provides an example of what may happen when prices increase.
 Also, see Module 8 regarding breakeven point.

To minimize loss in participation, use "psychology in pricing," such as:

- Raise prices over the summer, so the increases are not so noticeable.
- Change menu offerings, e.g., if now serving "dinner" type or "meat and potato" type menus, convert to more of a lunch menu or popular "fast food" approach.
- Be prepared to answer questions about why the price increase is necessary; have data ready that shows revenue and expenses; show percentage that food costs have increased and/or relate raises that employees received to price increases. Go on the offensive.
- Consider setting the prices at easy sums for children and cashiers to handle—e.g., if prices are now \$1.15 and \$1.35, go to \$1.00 and \$1.25 or \$1.25 and \$1.50.
- Price some a la carte items to fit the change the customer may have —e.g., if price is \$1.35, have some 15¢ items that will appeal to the customer.
- Establish two-tier meal pricing, for example:

```
Lunch Specials......$1.25
Super Combo......$1.50
```

Exhibit 10.3 analyzes a price increase. It may not yield the increase in revenue expected.

Exhibit 10.3. Analyzing a Lunch Price Increase

Present lunch price is \$1.00

What if price remains the same next year?

How much would ADP be affected? What would be the profit or loss?

What if price is increased to \$1.05?

How much would ADP be affected?

How much would expenditures be affected?

What would be the profit or loss?

How many labor hours would have to be cut?

What if price is increased to \$1.10?

How much would participation in the program be affected?

How much would expenditures be affected?

What would be the profit or loss?

How many labor hours would have to be cut?

Presently serving an average of 3,000 lunches per day x 180 days = 540,000 lunches per year; 35% are free and 4% are reduced meals.

PROJECTED REVENUE	NO PRICE INCREASE	%	5¢ PRICE INCREASE	%	10¢ PRICE INCREASE	%
Payment Free Reduced Other Income	\$399,232 321,772 36,774 44,010	+1.0%	\$391,162 321,772 36,774 44,010	-5%	\$385,398 321,772 36,774 44,010	-10%
TOTAL REVENUE	\$801,788		\$793,718		\$787,954	
EXPENSES						
Food Labor Fringe Benefits Indirect & Other	\$320,715 252,563 64,143 168,375	+0.5%	\$311,093 247,511 62,860 168,375	-3% -2 -2	\$304,679 244,986 62,860 168,375	-5% -3 -2
TOTAL EXPENSES	\$805,796		\$789,839		\$780,900	
PROFIT (LOSS)	(\$4,008)		+ \$3,879		+ \$7,054	

SET A LA CARTE PRICES

A survey of the competition and costing of the products, as well as labor required, should be considered when setting an a la carte price.

Exhibit 10.4 provides the factual information needed for management to set a la carte prices. The facts needed to set a la carte prices are:

- Food cost
- Amount of labor involved
- What the outside world charges
 - Convenience stores
 - Fast food restaurants
 - Grocery stores
 - Shopping malls
 - Vending machines

A psychological factor to be considered is "what the traffic will bear" and what something is worth. For example, the food cost of French fries may be no more than 10 or 12 cents but the a la carte price can be set at 75 cents. This is 10 cents under what McDonald's charges and the customer thinks fries are worth 75 cents. Also the director's or school district's emphasis or philosophy comes into the decision. A fresh apple may cost 16 cents and may be priced only at 40 cents because the emphasis is on increasing fresh fruit consumption.

Also to be considered is the a la carte price should be such that any combination of items on the menu that would qualify for a lunch under "offer versus served" would equal or exceed the price charged for lunch or breakfast. In such cases, the three a la carte items could be considered a lunch and claimed as a reimbursable meal; however, the a la carte prices charged the student would not be less than the lunch price (if a la carte price is higher than lunch price, the lunch price would be charged if it is to be considered a reimbursable lunch). For example, if the lunch price is \$1.25, the a la carte prices for menu items could be similar to those below:

Pizza (Slice)	\$1.00
Tossed Salad	\$.50
Fruit Cup	\$.50
Milk	\$.35

If a student purchased a slice of pizza (that contains two menu items) and milk, this would qualify as a lunch and the student would pay \$1.25 (not \$1.35). It is to the student's advantage as well as to the SFS program's advantage. The federal reimbursement, along with the value of USDA commodities, is more than enough to make up the difference in the a la carte price and the lunch price.

Exhibit 10.4. Example of A la Carte Price Factors One May Use

FOOD ITEM	FOOD COST	LABOR COST ³⁶	CURRENT PRICES CHARGED	PRICES CHARGED OUTSIDE	PRICES SET	FOOD COST %
Milk, ½ pt	\$.176	X	\$.30	FF \$.55	\$.40 ³⁷	43%
Ice Cream Sandwich	\$.17	X	\$.50	CS \$.50	\$.50	34%
Cookies, 2/pkg	\$.13	X	\$.30	FF \$.79	\$.40	33%
Pretzel, Soft	\$.18	XX	\$.50	SM \$.89	\$.60	30%
Popcorn	\$.15	X	\$.50	VM \$.50	\$.50	30%
Yogurt, 8 oz	\$.39	X	\$.65	GS \$.39	\$.652	60%
Apple	\$.16	XX	\$.25	GS \$.29	\$.252	64%
Milk Shake 12 oz	\$.12	XXX	\$.75	FF \$1.08	\$.85 ³⁸	14%
Salad, Small	\$.12	XXX	\$.50	FF \$.79	\$.50	24%

Abbreviations used to designate outside sources:

CS = convenience stores

FF = fast foods

GS = grocery stores

SM = shopping mall

VM = vending machines

INCREASE PARTICIPATION AND SALES

Before introducing a marketing plan for increasing participation, it needs to be determined whether increasing participation will also increase the deficit. See Exhibit 10.2. Carefully calculate expected revenue (see Module 3) and expenses, being very realistic (see Modules 4, 6 and 8).

If all students were served that quality to receive free and reduced price meals, the participation in many school districts would increase. Exhibit 10.5 provides a form for determining lost revenue opportunities.

Exhibit 10.5. Form for Determining Lost Revenue Opportunities

³⁶If labor is required only for ordering, counting, and selling, it is indicated with "X"; if minimal labor is also required to prepare product, it is indicated with "XX" in chart; and "XXX" indicates a lot of preparation and/or cleanup time is required, e.g., school-baked cinnamon rolls and salads (lot of preparation) or milk shakes (machine cleanup).

³⁷Nutritional items that are priced low to encourage increased consumption.

³⁸One factor not shown as a column in chart above, but that is considered in the price set, is "what the traffic will bear" or what the customer will pay. It is the value perceived by the customer. Popular commercial-brand items can usually be priced higher than others.

LUNCH: FREE		
1. Number Free Approved		
2. Number Free Eating Lunch	_	
3. Number Not Eating Lunch	=	
4. State Reimbursement for Free		\$
5. Federal Reimbursement for Fre	e +	
6. Total Revenue for Free	=	\$
+ Value of Commodities (\$) =	\$
6A. Total + Commodities		\$
7. Total Not Eating (3)	x Total Revenue (6A) \$ =	\$
Dollars Lost For Free Per Year		
8. Number of Days Lunch Is Serve	ed	
9. Number Days (8) x	Dollars Per Day (7) \$ =	\$
Dollars Lost For Free Per Year		
LUNCH: REDUCED PRICE		
1. Number Reduced Price Approv	ed	
2. Number Reduced Price Eating	Lunch –	
3. Number Not Eating Lunch:	=	
4. Amount Student Pays for Redu	ced Price	\$
5. State Reimbursement for Reduc	ced Price +	
6. Federal Reimbursement for Rec	luced Price +	
7. Total Revenue for a Reduced P.	rice Lunch =	\$
+ Value of Commodities (\$) =	\$
7A. Total + Commodities		\$
8. Total Not Eating (3)	x Total Revenue (7A) \$ =	\$
Dollars Lost Per Day		
9. Number of Days Lunch Is Serve	ed	
10. Number Days (9) x	Dollars Per Day (8) =	\$
Dollars Lost For Year		

Exhibit 10.6 provides some ideas for increasing participation in the federally subsidized meal programs.

Exhibit 10.6. Some Ways to Increase Participation

- •Start universal free meals if over 90 percent of the students qualify for free and reduced-price meals and if it would be cost effective.
- •Use direct certification of Food Stamp and Aid for Families with Dependent Children (AFDC) families to qualify students for free meals.
- Use family applications to approve all school-age siblings in the family who will also qualify for free and reduced-price meals.

• **Re-notify students that they qualify** for free or reduced-price meals and make it easy for them to start receiving the meals.

- Survey students, teachers, and parents to find out why participation is low.
- Take corrective action in areas needed.
- Market, promote, and advertise program to parents, teachers, administration, community, and students.
- Plan menus students like, improve food quality, and offer more choices.
- Improve food servers' attitudes; whereas they treat students as true customers.

Increasing sales of foods sold a la carte can be very positive for the program. It can increase the customer count, make students happy, and provide additional revenue. It will be limited, however, by the money the customer has to spend. If the school is located in a needy school district, the customer may not have the money to spend or it may entice students to spend their limited resources on foods they may otherwise receive free or at reduced-price. Therefore, the state department discourages a la carte sales in such areas. Also to be considered are the local, state, and federal regulations or restrictions.

START A BREAKFAST PROGRAM

A breakfast program means more revenue and more expenditures. Most of all it can provide nutritious food to start the day off for students who otherwise may not eat breakfast. It also may mean additional labor hours for employees or more work to do for an over-staffed school. Several things should be checked before beginning a breakfast program (Exhibit 10.7).

The most common mistakes are menus being too traditional and expensive and containing too much food for school-age children to eat in the limited time. Also, some barriers to breakfast programs are bus scheduling and a lack of supervisory staff to be available in the dining room.

Exhibit 10.7. Steps to Take When Starting a Breakfast Program

- 1. Precost program and determine revenue for the program.
- 2. Survey community for need and number who will use program.
- 3. Plan easy-to-eat and easy-to-prepare breakfast menus.
- 4. Have taste party to test foods/menus.
- 5. Take the breakfast to where customers are in the building if permitted.

A certain volume is necessary to make a breakfast program break even. A breakfast may be **costing** the lunch program.

A breakfast program does not have to be served before students start to class; it can be after one or two class periods, in which case the lunch periods must be adjusted accordingly.

Many students do not want a whole breakfast. It may be desirable also to sell breakfast items at a la carte prices.

BEGIN A CATERING PROGRAM

Catering is a different business from serving breakfast and lunch at breakeven prices and should be treated as a profit maker. Courses in catering are offered at community colleges and culinary schools, books are available on the subject, and many professional journal articles address the subject.

Some of the first questions to be answered when considering a catering program are: Who will be the customer? Will service be limited to school activities? Exhibit 10.8 provides some steps to take before beginning a catering program.

Exhibit 10.8. Steps to Beginning a Catering Program

- 1. Be able to identify costs and revenues from catering.
- 2. Plan menus and offerings.
- 3. Cost out services and set prices.
- 4. Put services, menus, and prices in printed brochure or handbook.
- 5. Design brochure of offerings or distribute printed handbook.
- 6. Check out state sales tax laws.
- 7. Purchase equipment needed.
- 8. Market the program.

Before going outside the schools, political problems that may result from being in competition with commercial companies should be considered carefully. The support of the superintendent and school board should be established at the outset. State Department of Education recommends marketing the services as a means of assuring fiscal integrity of the program.

PROVIDE FOOD FOR A SUMMER FOODSERVICE PROGRAM

The Summer Foodservice Program can be an excellent way to increase revenue, if the central office works twelve months a year, if some of the school-based foodservice employees are interested in working during the summer, and if there is a need for the program.

There are basically two ways of being involved with the Summer Foodservice Program: (1) as a sponsor or (2) as a vendor. The program is funded much differently than the National School Lunch Program—the reporting system is different, and many of the regulations are different. Like the National School Lunch Program, the Summer Foodservice Program is administered by USDA, but it has higher rates of meal reimbursement (see Exhibit 10.9). Some states administer this program and some states do not, in which case the regional office of USDA will administer the program. Guidance materials should be obtained and read carefully before making the decision to be a sponsor.

Exhibit 10.9. Sample Summer Foodservice Reimbursement Rates

TYPE REIMBURSEMENT	BREAKFAST	LUNCH OR SUPPER	SNACK OR SUPPLEMENT
Operating Costs	\$1.1375	\$2.0425	\$.5350
Administrative Costs	.1050	.1950	.0525
TOTAL	\$1.2425	\$2.2375	\$.5875

Source: Food and Nutrition Service, U.S. Department of Agriculture.

Check with your state department for current rates.

PROVIDE CONTRACTED SERVICES

In many areas of the state and the country there is a need by government agencies for food services for different groups. When should school foodservice (SFS) provide services outside the schools? (See Exhibit 10.10.) Decisions in this regard must be made by the administration and possibly the school board. Below are some of the pluses for school food services providing other services to the community.

Exhibit 10.10. Reasons for Providing Contracted Services

- Schools are located conveniently in neighborhoods.
- Existing equipment and space are put to use during idle time.
- Volume of business is increased, which helps pay indirect costs.
- More jobs and year-round jobs are provided for some.
- SFS may already have trained, experienced employees.
- Community support of schools is encouraged, particularly among senior citizens.

Some groups needing food services to be considered are:

- 1. Summer Foodservice Program
- 2. Senior Citizen Nutrition Program
- 3. Day cares, public and private, child and adult
- 4. Other public school districts and private schools
- 5. Meals on Wheels
- 6. Homeless
- 7. County or city government buildings
- 8. Head Start Program
- 9. After-school child care programs
- 10. Rehabilitation centers

When providing services to other agencies and private groups, it is imperative that the SFS have a good accounting system. It is essential that the director be provided with good management data, whereby the costs of operating each program can be identified. Also, the foodservice staff must be knowledgeable about the regulations of other programs and must take the same precautions as with the National School Lunch and Breakfast Programs to carry out those regulations. The consequences of not carrying out the regulations could be devastating for the SFS program.

The contract between the school district and the group should be a legal document and developed with the help of legal counsel. A sample contract is provided in Exhibit 10.11.

Exhibit 10.11. Sample Contract for Services

These requests will be honored when possible.

OFFICE OF FOOD SERVICES
FAIRFAX COUNTY PUBLIC SCHOOLS
SPRINGFIELD SUPPORT CENTER
6840 Industrial Road
Springfield, Virginia 22151

AGREEMENT FOR LUNCHES For 1991-1992 SCHOOL YEAR

	between	
	and	
FAIRFAX COUNT	TY PUBLIC SCHOOLS	
The Fairfax County School Board, Office of Folunches supplied to the will be prelunch, meeting one-third of the recommended determined by contractor), will include:	pared under sanitary conditions	using quality foods. The
	Lunch I (Through Age 6) \$1.95	Lunch II (Age 6 & Over) \$2.10
Meat or Meat Alternate: (One of the following or combinations to give equivalent quantities)		
Meat, poultry, fish	1 ½ ounces	2 ounces
Cheese	1 ½ ounces	2 ounces
Egg, Large	1	1
Cooked dry beans or peas	_ cup	½ cup
Peanut Butter	3 Tbsp	4 Tbsp
Vegetables and/or Fruit		
(Minimum of two sources)	½ cup	3⁄4 cup
Bread or Bread Alternate	8 servings/week	8 serving/week
Milk (2% fat Content) The menu components and portions of Lunch I and Luncl 1984), and also meet Child Care requirements. Approximately Lunch I @ \$ 1.95 per meal and/or significant changes in costs for the meal service occur, the given a 30-day notice before prices are increased.	Lunch II @ \$2.10 per meal will	be needed for each day. If
The exact number of lunches will be telephoned to school day during which Fairfax County Public Schools the day care center and should be done by 11:30 a. m. ea	are in session. The pick up of the f	food is the responsibility of
If Menu item is unacceptable, a request for change	must be submitted to Assistant Dire	ector, Food Services.

Exhibit 10.11 Continued

A security deposit equal to approximately one month's charges will be required unless previous year's deposit is on file when submitting the contact for the 1991-92 school year. The signed contract with a check for the amount of deposit attached should be sent to the Office of Food Services no later than <u>August 9, 1991</u>, in order for service to begin on <u>September 3, 1991</u>. Make check payable to:

FAIRFAX COUNTY PUBLIC SCHOOLS

and return to:

Office of Food Services 6840 Industrial Road Springfield, Virginia 22151 Attention: Meir Zupovitz

September 3, 1991 through June 16, 1992

The deposit will be held until completion of the contract or upon voiding of the contract. If the contract is voided because of non-payment, the security deposit will be applied to any outstanding balance.

Food Services will furnish the day care center with a signed receiving report daily, signed by the school manager and the day care center's authorized person picking up or receiving the food. Food Services will also furnish the day care center with an itemized bill monthly. Payments must be made within 15 days after receipt of the statement. Failure to comply with this requirement may result in cancellation of service. This contract may be voided by either party by giving a 10-day notice in writing.

The period covered by this contract is (check period to time service is requested)

Virginia State Tax Exempt No.		Day Care Center or Private School Representative Signature
Date	Address	
Telephone Number		
Office Use Only		Director, Food Services
Date deposit receivedAmount of Deposit		
		County Purchasing Agent
Date		

Source: Fairfax County (VA) Public Schools, 1992.

SUMMARY AND CHECKLIST

This manual has provided several tools to use in controlling costs. Using the following form, check off what you are presently doing to control costs and to be a good financial manager, and mark the items you plan to start doing.

FORM FOR CHECKING IF COST CONTROLS IN PLACE

CHECKLIST

Instructions:

Check steps you now take as cost control measures and indicate the steps you plan to take in the future with dates for beginning the procedures.

		YES (1)	NO (2)	DATE TO BEGIN (3)
1.	Precost recipes and menus.			
2.	Postcost menus.			
3.	Carry less than 15 days of inventory.			
4.	Staff schools based on MPLH.			
5.	Increase productivity or MPLH each year.			
6.	Prepare monthly profit and loss statement for school district.			
7.	Prepare monthly profit and loss statements for each school.			
8.	Ensure that managers know how to reduce costs.			
9.	Examine ways to reduce food costs at each school.			
10.	Examine ways to reduce labor costs at each school.			
11.	Ensure that managers and staffs are involved in controlling costs.			
12.	Increase revenue by providing other services.			
13.	Ensure that managers understand the profit and loss statements.			
14.	Prepare a budget for the school district.			
15.	Use the budget as a cost control tool.			

APPENDIX A

GLOSSARY OF TERMS

GLOSSARY OF TERMS

ACCOUNTING SYSTEM—the measuring, communicating, and interpreting of financial activity.

ACCOUNTS PAYABLE—the amount owed creditors for goods, e.g., foods and paper supplies, and services, including the amount owed employees for days worked not yet paid.

ACCOUNTS RECEIVABLE—the amount that is owed the food services for services render, e.g., federal and state reimbursement and catered meals billed.

ACCRUAL ACCOUNTING—means recording revenue in the period earned and recording expenses in the period they were incurred.

ACCRUALS—accounts receivable and accounts payable.

A LA CARTE—when items are priced separately and sold separately from a meal.

ALLOWABLE FUND BALANCE—federal regulations limit the school food service net cash resources to an amount that does not exceed three (3) months average expenditures. In the event that the school food service net account exceeds 3 months' average expenditures, a letter of justification for excess funds and/or a reduction of funds plan must be submitted by the school food authority to the Virginia State Department of Education, School Nutrition Programs for approval. The letter must detail the reason for the excess funds and the plan for the use and/or expenditure of the excess funds.

APPROPRIATION—money allocated by the federal or state governments for various programs.

ASSETS—things of value owned by the food services which are usable and will benefit in the future.

ATTENDANCE FACTOR—the average number of students present at the school. A percentage developed no less than once each school year which accounts for the difference between enrollment and attendance.

AUDIT—the system used to evaluate operation of Child Nutrition programs for compliance with laws and regulations.

AUDIT TRAIL—a procedure that traces through all stages of an accounting system or data-processing operation, starting from the source document (at point of sale) and ending with the final report (monthly state claim).

AVERAGE DAILY PARTICIPATION—the average number of children, by eligibility category, participating in the lunch or breakfast program each operating day.

BALANCE SHEET—a financial statement that shows the financial condition of the school food service's program at a given point, i.e., assets and liabilities.

BASELINE BUDGET—planning a budget based on the assumption that all the previous year's expenditures were necessary and will be duplicated.

BEGINNING INVENTORY—food and supplies on hand and available for use at the beginning of the accounting period (usually month).

BONUS COMMODITIES—food products that USDA purchases in addition to the entitlement commodities. The quantity available each year is not guaranteed and varies from year to year.

BOTTOM-UP BUDGET—a decentralized approach to budget planning, when each cost center (school) plans a budget and the school district's budget is made up by combining all the budgets together.

BREAKEVEN POINT—the amount of revenue needed to cover the costs—fixed and variable.

BREAKFAST—a meal which meets the federal nutritional requirements and which is served to a child in the morning hours, at or close to the beginning of the child's day at school.

BUDGET—an organized financial plan for a specified period of time (usually a year), that forecast sales and services, revenue and expenditures.

BUDGETARY FUNDS—revenue generally received from taxes, e.g., general fund, which provides the basic education programs; the funds are not generating revenue as in a business and are generally preset.

CASH BUDGET—financial plan based on projected revenue and expenses, e.g. food services and businesses in general.

CASH ACCOUNTING—means recording revenue when received and expenses incurred but not yet paid.

CASH REIMBURSEMENT RATES—the monies received for serving meals that meet the federal meal requirements.

CENTRAL KITCHEN—the facility that prepares meals for delivery to other sites.

CENTRALIZED PREPARATION—preparing foods in one location for one or more other locations.

CHILD NUTRITION LABEL—a USDA certification that commercially prepared foods have been evaluated by USDA's Food and Nutrition Services to determine their contribution to the meal requirements.

CAN LABEL—the Child Nutrition Labeling Program, providing USDA statement identifying the specific contribution that a food product makes toward meeting the requirements of the meal pattern.

COMMODITIES—also referred to as donated foods and donated commodities. The United States Department of Agriculture donated foods provided to school food services under the National School Lunch Program.

COMPETITIVE FOODS—any foods sold to students in the food service areas during the breakfast or lunch periods in competition with the School Lunch or Breakfast programs.

CONTRIBUTION MARGIN—the amount of revenue available after paying variable cost to pay for fixed cost.

CONVENIENCE SYSTEM—using a maximum amount of processed food (for example, using all bakery breads, pre-fried chicken, and preportioned condiments, and using disposable dishes).

CONVENTIONAL SYSTEM—preparation of food from raw ingredients on the premises (using a minimum of bakery bread and prepared products and washing dishes).

COOPERATIVE PURCHASING—group purchasing; when more than one school district combines together to competitively bid products needed.

COST CENTER—a school, warehouse, or activity within that is responsible for financial management and is accountable.

COST PLUS FIXED FEE BUYING—an agreement between the school district and the vendor (supplier) that the price charged will be the cost plus the preset fee, which includes profit, cost of handling and delivering.

CREDITS—a decrease in assets and an increase in liabilities.

DEBITS—an increase in assets and a decrease in liabilities.

DEFICIT—expenditures exceed revenue and this results in a loss.

DIRECT COST—items of cost that can be specifically identified.

DUAL PRICING—use of two student meal prices, e.g., a specified lunch priced at \$1.50 (for students) and another type lunch priced at \$1.75 (for students).

ELIGIBLE CHILD—one who qualifies for free or reduced-price meals under the federal guidelines.

ENCUMBRANCES—financial commitments, e.g., purchase orders.

ENDING INVENTORY—food and supplies on hand and available for use at the end of the accounting period.

ENTERPRISE FUNDS—sometimes referred to as proprietary or revolving funds; funds that generate revenue by producing goods and services that are sold, e.g., school food services and bookstore. The accounting for an enterprise fund parallels a business entity.

ENTITLEMENT COMMODITIES—a specified amount of food products offered to each school district that operates under the NSLP.

EQUIVALENT MEAL—a common measurement of output (breakfast, a la carte sales, snacks) based on the lunch.

EXPENDITURE—the costs; funds spent for goods and service, including labor costs and fringe benefits.

FIFO—rotating the stock, first in first out.

FINISHING KITCHEN—a kitchen that receives food partially prepared somewhere else and that finishes the preparation of the food and serves it.

FIXED COST—those costs that remain relatively constant or the same during a given period of time regardless of the number served.

FOOD COMPONENT—one of the four food groups which compose the reimbursable school lunch, i.e., meat or meat alternate, milk, bread or bread alternate, and vegetable/fruit.

FOOD ITEM—one of the five required foods that compose the reimbursable school lunch, i.e., meat or meat alternate, milk, bread or bread alternate, and two (2) servings of vegetables, fruits, or a combination of both.

FOOD SERVICE MANAGEMENT COMPANY—a commercial enterprise or a nonprofit organization which is or may be contracted with by the school food authority to manage any aspect of the school food service.

FOODS OF MINIMAL NUTRITIONAL VALUE—a food which provides less that 5% of the USRDA for each of eight (8) specified nutrients per 100 calories and less than 5% of the USRDA for each of eight (8) specified nutrients per serving. The eight (8) nutrients to be assessed for this purpose are: protein, vitamin A, vitamin C, niacin, riboflavin, thiamin, calcium, and iron.

FREE MEALS—a lunch or breakfast meal served under the National School Lunch or Breakfast Program to a child from a household eligible for such benefits for which neither the child nor any member of the household pays or is required to work for the meal.

GENERAL LEDGER—record of increases and decreases in an account.

GROSS MARGIN—also referred to as gross profit, profit or loss after deducting cost of food and supplies and costs of labor necessary to producing the services from the total revenue.

INCOME STATEMENT—see profit and loss statement.

INDIRECT COSTS—those costs that cannot be directly identified because the amount is prorated across several programs; for example, utilities.

INVENTORY TURNOVER—number of times the inventory turnovers during a month.

LIABILITIES—what the food service owes or is obligated to pay out.

LOCAL FUNDS—also referred to as local appropriations, the funds that are provided by the school district or generated by the food service program.

LUNCH—a meal which meets the school lunch pattern for specified age/grade groups of children as defined in federal regulations.

MARKET VALUE—what it would cost for the item at a given time.

MATCHING REQUIREMENTS—state funds that must match federal funds as follows: (1) Three parts state or local money (including student payment) to one part Section 4 funds for paid meals, and (2) 10 percent of the product of all Section 4 funds multiplied by three.

MEAL EQUIVALENTS—see equivalent meal.

MEALS PER LABOR HOUR (MPLH)—commonly used in the school food service program to express efficiency or productivity rate of employees.

NET CASH RESOURCES—all monies as determined in accordance with the State agency's established accounting system, that are available to or have accrued to a school food authority's nonprofit school food service at any given time, less cash payable. Such monies may include, but are not limited to, cash on hand, cash receivable, earnings on investments, cash on deposit, and the value of stocks, bonds or other negotiable securities.

NET INCOME—profit or loss, difference in revenue and expenditures.

NONPROFIT—when applied to schools or institutions eligible for the School Lunch and Breakfast programs, mean exempt from income tax under Section 501(c)(3) of the Internal Revenue Code of 1954.

NONPROFIT SCHOOL FOOD SERVICE—all food service operations conducted by the school food authority principally for the benefit of school children, all of the revenue from which is used solely for the operation or improvement of such food services.

OFFER VERSUS SERVE—provisions of the National School Lunch Program and School Breakfast Program under which children must be offered a complete meal for the meal to qualify for federal subsidy, but children may select less, i.e., three of the five items offered for lunch and three of the four items offered for breakfast.

ON-SITE PREPARATION—food prepared and served in individual school kitchens; sometimes referred to as self-contained and traditional system.

PAID MEALS—refers to breakfasts and lunches sold to students who do not qualify for free and reduced-price meals.

PARTICIPATION—see AVERAGE DAILY PARTICIPATION.

PERPETUAL INVENTORY—an inventory system that maintains a continuous record (count) on each item in stock or on-hand.

PHYSICAL INVENTORY—an inventory system where at a point in time, normally at the end of the accounting period (end of month), all items in inventory are physically counted.

POINT OF SERVICE—that point in the food service operation where a determination can accurately be made that a reimbursable free, reduced price or paid meal has been served to an eligible child. POSTCOSTING—determining the actual cost of something (e.g., producing and serving a recipe or lunch).

PRECOSTING—determining the cost of something (e.g., a recipe or lunch) based on costs of the parts (ingredients).

PROCESSING CONTRACTS—agreements with companies entered into by state or USDA to turn donated commodities into another or similar product, e.g., ground beef into hamburger patties.

PRODUCTION RECORD—report that records food produced and may include a variety of information (e.g., forecasted quantities, size portions, and actual quantity used and number served).

PRODUCTIVITY RATES—for school food services is expressed in number of meals produced per labor hour.

PROFIT—revenue exceeds expenditures and this results in a profit.

PROFIT AND LOSS STATEMENT—also known as an income statement and statement of operation. It is a meaningful report that indicates how the school food service is doing financially during a period of time (generally done monthly and year-to-date).

PROPRIETARY-TYPE FUNDS—see ENTERPRISE FUNDS.

REBATES—money received back from a company for the value of the USDA commodities used in the products and the money received from a company as an incentive to use the product.

RECEIVING KITCHEN—the school kitchen that receives already prepared and portioned foods from another preparation site.

REDUCED-PRICE MEALS—a lunch or breakfast meal served under the National School Lunch or Breakfast Program to a child from a household eligible for such benefits. The price is less than the school food authority designated full price of the meal and which does not exceed the maximum allowable reduced price specified in federal or state regulations, and for which neither the child nor any member of the household is required to work for the meal.

REIMBURSABLE MEAL—a meal, meeting the USDA meal pattern, that is served to a child, priced as an entire meal, and qualifies for reimbursement under federal regulations.

REIMBURSEMENT—federal cash assistance including advances paid or payable to participating schools for meals served that meet federal requirements and served to eligible children. The amount received is based on type(breakfast/lunch) and category (free/reduced/paid) of meal served.

REVENUE—when applied to nonprofit school food service, means all monies received by or accruing to the nonprofit school food service in accordance with the State agency's established accounting system including, but not limited to, children's payments, earning on investments, other local revenues, and state and federal cash reimbursements.

REVOLVING FUNDS—see ENTERPRISE FUNDS.

SALES TAX—state and local governments may levy general sales taxes; public schools are exempt from paying many taxes; sale of food is exempt from most states' general taxes.

SATELLITE FOOD SERVICE—food prepared in one location and transported to another to be served.

SCHOOL FOOD AUTHORITY—the school district's governing body, which is held responsible for the food service program and the activities of the program.

SCHOOL YEAR—generally from July 1 through June 30.

SECTION 4 FUNDS—federal funds appropriated for all lunches.

SECTION 11 FUNDS—federal funds appropriated for free and reduced-price meals.

SEVERE NEED BREAKFAST SCHOOL—a school that served in the second preceding year, 40 percent or more of the lunches free or at reduced price qualifies as "SEVERE NEED" school and can receive additional federal subsidies for each free or reduced breakfast meal served.

SEVERE NEED LUNCH SCHOOL DISTRICT—a school district that served in the second preceding year, more than 60 percent of the lunches free or at reduced prices qualifies as a "SEVERE NEED" school district and meals are reimbursed at a higher rate (1993 school year — two (2) cents additional per lunch meal).

STATE AGENCY—the office within the state department of education responsible for administering the National School Lunch and/or School Breakfast Program.

STATE MATCHING FUNDS—see MATCHING FUNDS.

STATE REIMBURSEMENT—the funds provided by the state for specific programs. STATEMENT OF INCOME—see profit and loss statement.

SUBSIDY—monetary and commodity assistance given by USDA to the school food service programs.

TOP-DOWN BUDGET—when a centralized budget is planned for a combination of cost centers.

USDA—United States Department of Agriculture.

VARIABLE COST—the costs that vary in direct proportion with volume of sales or number of customers served, e.g., food and disposable products.

ZERO-BASED BUDGETING—planning a budget as if for the first time by determining revenue by number served and sources of revenue and determining expenditures by costing out all items.

APPENDIX B DATA FORM

DATA NEEDED FOR USE IN THE COST CONTROL SEMINAR

Instructions: Complete and bring to seminar. It is for your use in seminar; without it the exercises cannot be completed.

1. Meal prices presently charged, or are expecting to charge, for this next school year.

SCHOOL CATEGORY (1)	PAYING STUDENT (2)	REDUCED-PRICE STUDENT (3)	ADULT (4)
LUNCH:			
Elementary			
Middle			
Secondary			
BREAKFAST:			
Elementary			
Middle			
Secondary			

2.	How much do you receive per breakfast and/or lunch from your state (matching funds)?

3. Costs covered by local funds (e.g., utilities, insurance, fringe benefits).

ITEMS (1)	AMOUNT \$s (2)

Data Needed - continued

4. What is the average number of meals you served per day and how much a la carte/other sales in the previous month or school year? Figures are averages for a day.

	SCHOOL LEVEL			
CATEGORY (1)	Elementary (2)	Middle (3)	Secondary (4)	TOTAL (5)
BREAKFASTS PER DAY: Free Reduced-Price Paid Student Paid Adult TOTAL BREAKFASTS				
LUNCHES PER DAY: Free Reduced-Price Paid Student Paid Adult TOTAL LUNCHES				
TOTAL MISCELLANEOUS/ A LA CARTE PER DAY TOTAL				

5. Complete the following for a particular school, providing the average number served breakfast and lunch (use figures for a day).

NAME OF SCHO	OL						
		REDUCI	ED-PRICE	PAID ST	TUDENT	PAID	ADULT
CATEGORY	NUMBER FREE	NUMBER	PRICE CHARGE D	NUMBER	PRICE CHARGE D	NUMBER	PRICE CHARGED
BREAKFAST LUNCH							
TOTAL MISCEL	LANEOUS a	and A LA C	ARTE	\$			
TOTAL OTHER	INCOME			\$			

Data Needed - continued

6. Complete the following for the same school as in number 5.

SCHOOL	
Month: (Select month with average monthly expenditures.) Number of days lunch meal was served:	
Food Expenses: Opening Inventory Food Purchased Closing Inventory Cost of Purchased Food Used	\$ _ + \$ _ - \$ _ = \$ _
USDA Commodity: Opening Inventory USDA Received Closing Inventory Cost of USDA Commodity Used	\$ _ + \$ _ - \$ _ + \$ _

7. Hourly wage survey of United States' commercial industries compared with Local SFS Wages

TYPE OF HOURLY EMPLOYEE (1)	COMMERCIAL LOWEST HOURLY WAGES (3)	COMMERCIAL HIGHEST HOURLY WAGES (4)	YOUR LOWEST HOURLY WAGES (5)	YOUR HIGHEST HOURLY WAGES (6)
Staff Employee or General Worker				
Crew Supervisor or Manager				

Data Needed - continued

8. Complete the following for all schools in your district. Make additional copies of this page, if needed.

SCHOOL (a)	AVERAGE NUMBER LUNCHES SERVED/ DAY (b)	AVERAGE NUMBER BREAK- FASTS SERVED/ DAY (c)	AVERAGE REVENUE FROM A LA CARTE/ OTHER SALES (d)	NUMBER LABOR HOURS ASSIGNED (e)	NUMBER EMPLOYEES (f)

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Data Needed - continued

9. Complete for school district for previous school year.

Total Revenue	\$ 100%
Total Salaries/Wages for School-Based Employees	
Total Fringe Benefits for School-Based Employees	
Total Salaries/Wages for Substitute Employees	
Total Salaries/Wages for Central Office Employees	
Total Fringe Benefits for Central Office Employees	
Food Cost (Purchased Foods)	
Commodities Used	
Telephone	
Utilities	
Maintenance	
Supplies/Disposables/Detergents	
Small and Large Equipment	
Other (e.g., Indirect Cost)	
TOTAL	\$ %

To determine percentage of cost by category divide by total revenue.

10.	Complete for school district for month
	(Select month with average monthly expenditures)

(Select month with a verage monthly expenditures)	
Food Expenses:	
Opening Inventory	\$
Food Purchased +	\$
Closing Inventory —	\$
Total Purchased Food Used	\$
USDA Commodity:	
Opening Inventory	\$
USDA Received +	\$
Closing Inventory —	\$
Total Commodity Food Used	\$

APPENDIX C FORMS

FORM C.1. PERCENT OF EXPENSE TO REVENUE

Revenue <u>\$</u>	100
Labor Costs (Including Fringe Benefits) <u>\$</u>	
Food Costs (Including Value of Commodities) <u>\$</u>	
Paper Products and Supplies <u>\$</u>	
Miscellaneous Cost (Telephone, Contracted Maintenance) <u>\$</u>	
Direct Overhead (Central Office Costs, etc.)\$	
Small and Large Equipment <u>\$</u>	
Indirect Overhead (Amount Charged by School District)\$	
SUBTOTAL\$	
PROFIT (LOSS)\$	
TOTAL\$	

FORM C.2. INSTRUCTIONS FOR PRORATING OVERHEAD COSTS

STEP ONE. Determine the total overhead costs by adding together such charges/costs as shown below:

- + Utilities, telephone
- + Central office staffs' salaries
- + Equipment, large
- + Repairs, maintenance
- + Computer hardware, software, supplies
- + Training and professional growth costs
- + Travel and vehicle maintenance
- + Other miscellaneous costs
- = Total Overhead Expenditures (Costs)

STEP TWO. Determine each school's meal equivalents.

To arrive at how much should be charged against each school, determine the meal equivalent, as follows:

MEAL EQUIVALENTS

Total Breakfasts Served (Divided by 3)	=	Meal Equivalents
Total Lunches Served	=	Meal Equivalents
Total A la Carte Items and Other Sales in Dollars (Divided by \$3)	=	Meal Equivalents
TOTAL EQUIVALENTS	=	Total Meal Equivalents ³⁹

STEP THREE. Determine each school's share of overhead expenditures by adding together meal equivalents for each school and dividing each school's meal equivalents by the total meal equivalents, as illustrated below:

 $^{^{\}rm 39}\text{Total}$ meal equivalents are also used when determining staffing for a school.

FORM C.2. INSTRUCTIONS FOR PRORATING OVERHEAD COSTS (continued)

	PRORATING OVERHEAD COSTS				
SCHOOL (1)	NUMBER MEAL EQUIVALENTS FOR MONTH (2)	"OVERHEAD FACTOR" PERCENT OF THE TOTAL (3)			
TOTAL MEAL EQUIVALENTS		100%			

The percentage becomes the overhead factor.

STEP FOUR. To determine each school's "Overhead Factor," determine what percent of the school district's overhead belongs to each school.

<u>Divide total meal equivalents for each school</u> = each school's "Overhead Factor" by total school district's meal equivalents

STEP FIVE. Multiply estimated overhead in dollars for school district by (x) "Overhead Factor" (convert % to decimals) = equals school's share of the total overhead cost.

STEP SIX. Determine day's overhead cost.

<u>Divide a school's overhead cost for one year</u> by number of serving days = a school's daily overhead costs

STEP SEVEN. Determine overhead cost per lunch/meal equivalent.

Use the school's daily overhead when preparing profit and loss by school.

<u>Total overhead expenditures (costs)</u> = overhead cost per meal equivalent divide by total meal equivalents

This overhead costs should be used when costing out a lunch. One half of this amount should be used when costing out a breakfast and half of this amount for each dollar from a la carte/snacks sales.

FORM C.3. DETERMINING REVENUE RECEIVED FOR BREAKFAST

SOURCE (1)	ELEMENTARY PAYING BREAKFAST (2)	SECONDARY PAYING BREAKFAST (3)	FREE BREAKFAST (4)	REDUCED- PRICE BREAKFAST (5)	ADULT BREAKFAST (6)
Cash Sales					
Federal Reimbursement					
Local Funds (Local Appropriations)					
State Matching Funds					
TOTALS					

FORM C.4. AVERAGE REVENUE FOR BREAKFAST

CATEGORY (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=) REVENUE BY CATEGORY (4)
Paid			
Free			
Reduced-Price			
Adults			
TOTALS			
AVERAGE REVENUE FOR BREAKFAST	Total Reven	ue by Category	_ ÷ Average Number Served Revenue for One Breakfast \$

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FORM C.5. DETERMINING REVENUE RECEIVED FOR LUNCH

SOURCE (1)	ELEMENTARY PAYING LUNCH (2)	SECONDARY PAYING LUNCH (3)	FREE LUNCH (4)	REDUCED- PRICE LUNCH (5)	ADULT LUNCH (6)
Cash Sales					
Federal Reimbursement					
Entitlement Commodity Value					
State Matching Funds					
Local Funds					
TOTALS					

FORM C.6. AVERAGE REVENUE FOR LUNCH

CATEGORY SERVED (1)	AVERAGE NUMBER SERVED (2)	(X) REVENUE BY CATEGORY (3)	(=) TOTAL REVENUE BY CATEGORY (4)	
Paid				
Free				
Reduced-Price				
Adults				
TOTALS				
AVERAGE REVENUE FOR	Total	Revenue	÷ Average Number Served	
LUNCH		= Ave	erage Revenue for One Lunch \$	
FORM C 7 DETERMINING REVENUE FOR A DAY (DATE)				

COUNT (2)	PRICE/RATE (3)	TOTAL (4)
	COUNT (2)	COUNT PRICE/RATE (3)

Federal Reimbursement for Paid	
Reduced Paid (Cash)	
Reduced Prepaid	
Federal Reimbursement for Reduced	
Federal Reimbursement for Free	
Local Funds	
Adult Paid	
Adult Prepaid	
A la Carte	
SUBTOTAL	
LUNCH:	
Student Paid (Cash)	
Student Prepaid	
Federal Reimbursement for Paid	
Reduced Paid (Cash)	
Reduced Prepaid	
Federal Reimbursement for Reduced	
Federal Reimbursement for Free	
State Matching Funds	
Local Funds	
Value of Commodities Received	
Adult Paid	
Adult Prepaid	
A la Carte	
Other Income	
SUBTOTAL	
TOTAL INCOME	

FORM C.8. COMPARISON OF STAFFING TO GUIDELINES

2. DETERMINE YOUR PRODUCTIVITY RATE

1.	DETERMINE MEAL EQUIVALENTS (MEQ)		
	Average Daily Number Breakfasts Served ÷ 3 (Include all student and adult breakfasts)	=	MEQ
	Average Daily Number Lunches Served ÷ 1 (Include all student and adult lunches)	=	MEQ (a.2)
	Average Daily \$'s in A la Carte Sales ÷ \$3 (Catering and other sales may be included)	=	(a.3) MEQ
			TOTAL MEQ (a.4)

	Total MEQ ÷ (a.4) No. Labor Hours 40 At Your School (b.1)	= MPLH Your Staff's Productivity (b.2)
3.	TO DETERMINE HOW YOU SHOULD BE S' GUIDELINES:	TAFFED ACCORDING TO
	Total MEQ ÷	=
	(a.4) MPLH from Guideline	No. Labor Hours
	(c.1)	(c.2)
4.	DOES YOUR STAFF HAVE HIGH OR LOW (To be completed after exercise with Form 4.4 ha	
	How many hours over the guidelines at the school?	(d.1)
	What is the difference between figure in b.1 and	
	c.2? If b.1 has more hours than c.2 the school has very low productivity.	2,

 $^{^{\}rm 40}{\rm Manager's}$ hours should be included in the totals.

FORM C.9. STAFFING OF SCHOOLS

School Number Lunches Number Breakfasts Equivalent A la Carte Equivalent Total Equivalent Meals	Staff atMeals per Labor Hour Staff with Labor Hours Cost of Labor per Day \$ Cost of Labor per Lunch \$
School Number Lunches Number Breakfasts Equivalent A la Carte Equivalent Total Equivalent Meals	Staff atMeals per Labor Hour Staff with Labor Hours Cost of Labor per Day \$ Cost of Labor per Lunch \$
Conventional School Number Lunches Number Breakfasts Equivalent A la Carte Equivalent Total Equivalent Meals	Staff atMeals
Satellite School Number Lunches Number Breakfasts Equivalent A la Carte Equivalent Total Equivalent Meals Central Production Kitchen	Staff at Meals per Labor Hour Staff with Labor Hours Cost of Labor per Day \$ Cost of Labor per Lunch \$ Cost of Labor per Lunch \$ Total Cost of Labor per Lunch \$

FORM C.10. STAFFING SCHOOLS

SCHOOL (a)	TYPE SYSTEM (b)	AVERAGE NUMBER LUNCHES SERVED /DAY (c)	AVERAGE NUMBER BREAK- FASTS SERVED /DAY (d)	AVERAGE REVENUE FROM A LA CARTE/ OTHER SALES (e)	TOTAL MEAL EQUIV- ALENTS (f)	MPLH (g)	NUMBER LABOR HOURS (h)
TOTALS							

(f) TOTAL MEAL EQUIVALENT ÷(h) NUMBER LABOR HOURS =AVERAGE MPLH

Average Lunches (c) + (Breakfast Equivalents d \div 3) + (A la Carte Equivalents e \div \$3) = Total Equivalent Meals (f)

 $\label{eq:total equivalent Meals (f) + MPLH (g) = Number Labor Hours (h)} \\ (Obtain MPLH (g) from Exhibits 4.4 and 4.5, \\ according to the type system, e.g., on-site production, pre-plated.)$

FORM C.11. DETERMINING AVERAGE COST OF LABOR

1.	Total Salaries and Wages for School-Based Employees for Year:	\$
2.	+ Fringe Benefits (Employer's Share) for Year: Social Security \$ Health Insurance Retirement Worker's Compensation Unemployment Insurance Life Insurance Subtotal:	\$
3.	+ Substitute Wages for Year	\$
4.	Total Labor Cost for Year:	\$
5.	Number Serving Days	
6.	Divide Total Labor Costs #4 by Number Serving Days #5	
_	(<u>\$</u>)	\$
7.	Average Daily Labor Cost	· · ·
8.	Number of Daily Labor Hours(School-Based Employees)	\$
9	Divide Total Average Daily Labor Costs #6 by Number of Daily Labor Hours #7	
10.	(<u>\$</u> ÷) Average Hourly Labor Cost	\$
11.	Average Hourly Labor Cost \$ Divided by MPLH (Use MPLH for your school, p. 4-8, b.2)	
	How much does overstaffing cost?	
12.	Number Labor x Average Costs \$ of a Labor Hour (#10 above)	
13.	Cost of Overstaffing Per Day	\$
14.	Number Serving Days x Cost Per Day \$ (#13 above)	
15.	Cost of Overstaffing for a Year	\$

FORM C.12. COMPARISON OF COST ACCORDING TO STAFFING MPLH

Projected average number meal equivalents (MEQ) per day(a)
Present MPLH (b) (See p. 4.8 for your MPLH)
Average cost per labor hour \$
A. MEQ (a) ÷ MPLH (b) = Labor Hours (f) Labor Hours (f) x Cost (d) \$ = Cost of Labor per Day (g) \$ Cost of Labor (g) \$ x Days (e) = Cost of Labor per Year (h) \$
B. MEQ (a) ÷ MPLH (c) = Labor Hours (i) Labor Hours (i) x Cost (d) \$ = Cost of Labor per Day (j) \$ Cost of Labor (j) \$ x Days (e) = Cost of Labor per Year (k) \$
C. Cost of Labor per Year (h) \$ Less Cost of Labor per Year (k) (—) Savings from Increasing MPLH by One (l) \$

FORM C.13. COST OF BREAKS

Average Cost of Labor Hour Including Fringe Benefits	\$
Cost of 15 Minute Break Per Day	\$
Number of Employees Getting Break	X
Daily Cost of Breaks	\$
Number of Serving Days	X
TOTAL COST PER YEAR	\$

FORM C.14. PRECOSTING A RECIPE

HAMBURGER	R SANDWICH					
Recipe yield: Portion:	s: Total Cost: \$at/meat alternate	Portion Cost: \$ Preparation Time:				
Cook utensil: Cook time:	minutes	Yields:				
Cook temp:	° F					
Food File Number	Ingredient Name	Quantity	Item Cost			
			\$			
INSTRUCTIO	NS:					
		TOTAL COST	\$ <u>.</u>			

FORM C.15. PRECOSTING A MENU

					TOTAL COST	OF FOOD RED	
MENU ITEM	MENU	SIZE SERV- ING	FORECAST NUMBER SERV- INGS	COST PER SERV- ING	USDA COMMOD- ITIES	PUR- CHASED FOOD	AVERAGE COST OF LUNCH
Meat/ Meat Alternate							
Vegetables							
Fruits							
Bread							
Other Food							
Milk							
			TOTAL (COST OF FO			
			СО				

			TOTAL (COST OF FO	OD USED		
			СО	ST PER LUN	СН		
Forecast Number	er:		Α	ctual Numl	ber Served:		
Students Adults A la Carte							
Total Lunches:		-					

USDA COM-MOD-ITIES

TOTAL COST OF FOOD PREPARED

> PUR-CHASED FOOD

AVER-AGE COST OF LUNCH NUM BER SERV-ED

USABLE LEFT-OVERS TOTAL COST FOR MENU SERVED

FORM C.16. POSTCOSTING MENUS UNDER FOOD-BASED

FORE-CAST NUM-BER SERV-INGS

SIZE SERV-ING

MENU

MENU ITEM COST PER SERV-ING

Meat/ Meat Alternate				\$	\$	\$	\$			\$
Vegetables										
Fruits										
Bread										
Other Food										
Milk										
			TOTAL (COST OF NCH	\$	\$	\$			\$
COST PER LUNCH INCLUDING VALUE OF COMMODITIES					10DITIES				\$	
Forecast Number:						Actu	al Number	Served:	•	1
Ad	idents ults a Carte									
Total	Lunches:									

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FORM C.17. PRODUCTION RECORD WITH POSTCOSTING OF FOOD

1. Date	2. Offer Versus Serve Yes No									
3. MENU										
	Oven Fried Green Bean Mashed Pot	Chicken s atoes	0:	Peaches Mixed Fi range Juic	Peaches Mixed Fruit cange Juice			Rolls Milk		
	4.	5.	6.	7. PLAN # Portions/Si	NED ze Portions	8.	9.	10.	11.	
	Foods Used	Yield From FBG or CAN	USDA Foods	GR III	GR IV	Amount Prepared	Left Over and/or Extra Sales	Cost per Unit	Cost per Menu Item	
MILK ½ pt		1/2 Pints Available 400								
MEAT/MEAT ALTERNATE Grades K-3 1½ oz Grades 4-6* 2 oz VEGETABLES/ FRUITS (2 or more) Grades K-3 ½ c										
GRAIN BREADS 12 servings per week										
OTHER FOODS	USDA Honey									
12. Reimbursable m GR III (K-3) GR IV (4-12) *Total Reimburs **Useable ***Not Reused		<u> </u>		13. Nonreimbursable meals served and extra food sold: Extra Milk Extra Sales (Menu Items) Extra Sales (Non-Menu Items) Adult/Misc. Meals Nonrevenue Meals (Not Included) TOTAL MEALS Total A la Carte SERVED				or \$. Each Lunch		

FBG = Food Buying Guide
GR = Group
C = Cup

CN = Child NutritionK = Kindergarten# = Number

FORM C.18. PRODUCTION RECORD

					TOTAL FOOD F	COST OF REPARED				
MENU ITEM	MENU	SIZE SERV- ING	FORE- CAST NUM- BER SERV- INGS	COST PER SERV- ING	USDA COM- MOD- ITIES	PUR- CHASED FOOD	AVER- AGE COST OF LUNCH	NUM BER SERV- ED	USABLE LEFT- OVERS	TOTAL COST FOR MENU SERVED
Meat/ Meat Alternate	Ham & Cheese Sandwich	1, 1½ oz 1,1 oz	350 350	\$	\$	\$	\$			\$
Vegetables Fruits	Tomato Soup or Fresh Apples or Sliced Peaches	1 cup 1 ½ cup	100 200 300							
Bread	Croissant Crackers	1, 2 oz 1 pkg, 4 pieces	350 100							
Other Food	Mustard/ Mayonnaise, Lite	1 pkt 1 pkt	100 350							
Milk	Choice of Milk: Skim or Whole or Chocolate, 1% Fat	½ pint	25 25 275							
			TOTAL COST OF \$ \$				\$			\$
			INCLUI	COST PE DING VALU	ER LUNCH E OF COMM	IODITIES				\$

Forecast Number:	Actual Number Served:	
Students Adults A la Carte		_ _
Total Lunches:		_

A.	Divide mo	nth's food cos	st by number o	f serving days in	month, to determine daily food cost.
	Food Cost	\$	÷ No. l	Days	= Daily Food Cost \$
B.	Divide end stock.	ling inventory	by daily food	cost——the ansv	wer is number of days inventory in
	Ending Inv	ventory \$	<u> </u>	Daily Food Cost \$	= No. Days
C.	Example:				
				nover rate is twice llowing formula:	ce a month (if 20 serving days in the
	20 ÷ No. Γ	Days(in invento		tory Turnover R	Cate
\$	+	= \$	- \$	= \$	Food Cost for Month
If there v	were 19 servi	ng days in the	e month, what i	is the average dai	ily food cost?
\$		= \$	Ave	erage Daily Food	d Cost
How ma	ny days of fo	od are in inve	entory?		
\$	\$	=	Days		<u> </u>
What is	the inventory	turnover rate	e?		
	÷	=	Turnovers		

FORM C.20. EXPENDITURES FOR DAY AND COST OF A LUNCH

CATEGORY	TOTAL FOR DAY	% OF REVENUE
REVENUE (1)	\$ (2)	100% (3)
Labor (provided by Central Office)	\$	(b)
Fringe Benefits (provided by Central Office)	(c)	(d)
Substitute Labor Number hours x Rate of pay =	(e)	(f)
TOTAL LABOR COST	(g)	(h)
Food Used:		
Purchased (see Production Record)	\$	(j)
USDA Commodities (see Production Record)	(k)	(1)
TOTAL FOOD COST	\$	(n)
TOTAL DISPOSABLES AND SUPPLIES	(o)	(p)
Other Costs:		
Telephone	(q)	
Trash Removal	(r)	
Miscellaneous Cost	(s)	
Direct (provided by Central Office)	(t)	
Indirect (provided by Central Office)	(u)	
TOTAL OTHER COST	(v)	(w)
TOTAL EXPENDITURES (Add together g + m + o + v = x) or Total Expenditures	(x)	(y)
PROFIT OR (LOSS) (Revenue less Expenditures)	\$	

FORM C.20. EXPENDITURES FOR DAY AND COST OF A LUNCH (continued)

TOTAL MEAL EQUIVALENT FOR DAY		
# Breakfast ÷ 3	=	a ^T
\$ A la Carte ÷ \$3	=	b ^I
Lunch (C1)		$c^{\overline{1}}$
TOTAL EQUIVALENT MEALS		$d^{\overline{1}}$
TOTAL EXPENDITURES FOR THE DAY		\$ (x)
Divided by total meal equivalent (c ²)		d ^T
COST OF PRODUCING AND SERVING A LUNCH $(x \div d^1 = e^1)$		\$ e ¹

NOTE: If a substitute had been used, the meal cost would be greater. Figure the cost using a 3-hour substitute. What would be the per lunch cost?

FORM C.21. REDUCING COST OF A MENU

MENU ITEMS (1)	PRESENT COST (2)	REDUCED COST (3)	CHANGES MADE (4)
TOTAL			

FORM C.22. BREAKEVEN POINT ANALYSIS

ITEM (1)	\$ (2)	% (3)	FC (\$) (4)	VC (%) (5)
Revenue for Day		100%		
Food Cost				
Labor Cost for: Management Benefits Core Staff Benefits				
Indirect				
Other Labor Costs				
Telephone				
Trash Removal				
Paper/Supplies				
Total Cost				

\$ FC	= \$BEP
100% - <u>%</u> VC = <u>%</u> CM	

FORM C.23. FRANCHISEE'S BREAKEVEN POINT

START UP COS	ST OF \$		<u></u>		
PRORATED OV	ER 3 YEARS	<u> </u>	/Day (SERV.	DAYS)
% F	FRANCHISE FE	EE ON AL	L SALES		
REQUIRES	PEOPLE,	HOU	RS EACH, PR	EPARING, SER	VING, CLEANING
FOOD COST of	<u></u> % -	%			

ITEM (1)	FIXE	CD COST (2)	VARIABLE COST (3)
Start Up Cost	\$		%
Food Cost			
Paper Supplies/Detergents			
Franchise Fee			
Labor Cost @ \$/Hr			
Overhead			
	\$	FC	% VC

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FORM C.24. SCHOOL FOOD SERVICE BUDGET

REVENUE (1)	TOTAL (2)	PERCENT
BREAKFAST: Number Paying Elementary x \$ Price Charged Number Paying Secondary X \$ Price Charged Number Reduced Price x \$ Price Charged Number Paying Adult x \$ Price Charged Number Student Paying x \$ Federal Reimbursement Number Reduced Price x \$ Federal Reimbursement Number Free x \$ Federal Reimbursement	(2)	(3)
TOTAL REVENUE FROM BREAKFAST		
LUNCH: Number Paying Elementary x \$ Price Charged Number Paying Secondary X \$ Price Charged Number Reduced Price x \$ Price Charged Number Paying Adult x \$ Price Charged Number Student Paying x \$ Federal Reimbursement Number Reduced Price x \$ Federal Reimbursement Number Free x \$ Federal Reimbursement Number Reimbursable Lunches x \$ State Reimbursement		
TOTAL REVENUE FROM LUNCH		
OTHER REVENUE: A la Carte Sales Special Functions or Catering Interest USDA Donated Commodities USDA Commodity Rebates Other State Matching		
TOTAL REVENUE FROM OTHER SOURCES		
TOTAL REVENUE		
EXPENDITURES	TOTAL	PERCENT
FOOD COSTS (Including value of commodities used) ⁴¹		
SCHOOL STAFF: Wages and Salaries Fringe Benefits, Employer's Share LABOR AND FRINGE BENEFITS		
LABOR AND FRINGE BENEFITS CENTRAL OFFICE STAFF SALARIES		
SUPPLIES, DETERGENTS, AND DISPOSABLES		
SMALL EQUIPMENT AND OFFICE SUPPLIES		
LARGE EQUIPMENT		
OTHER OPERATING EXPENSES		
TOTAL EXPENDITURES		

 $^{^{\}rm 41}\mbox{Value}$ of commodities may or may not be included as a revenue and as an expense.

FORM C.25. DETERMINING LOST REVENUE OPPORTUNITIES

LUNCH	I: FREE				
1.	Number Free Approved				
2.	Number Free Eating Lunch	_			
3.	Number Not Eating Lunch	=			
3. 4.	State Reimbursement for Free	_	\$		
5.	Federal Reimbursement for Free	+	Ψ		
6.	Total Revenue for Free	'			
0.	+ Value of Commodities (\$)	=	\$		
	value of commodities (Ψ		
6A.	Total + Commodities		\$		
7.	Total Not Eating (3) x Total Revenue (6A) \$	=	\$		
Dollars	Lost For Free Per Year				
8.	Number of Days Lunch Is Served		Φ		
9.	Number Days (8) x Dollars Per Day (7) \$	=	\$		
Dollars	Lost For Free Per Year				
LUNCH	I: REDUCED PRICE				
4	W. J. D. J. ID.; A. J.				
1.	Number Reduced Price Approved				
2.	Number Reduced Price Eating Lunch	_			
3.	Number Not Eating Lunch:	=	Ф		
4.	Amount Student Pays for Reduced Price		\$		
5.	State Reimbursement for Reduced Price	+			
6.	Federal Reimbursement for Reduced Price	+			
7.	Total Revenue for a Reduced Price Lunch	=	\$		
	+ Value of Commodities (\$)	=	\$		
7A.	Total + Commodities		\$		
8.	Total Not Eating (3) x Total Revenue (7A) \$	=	\$		
	Lost Per Day		,		
	•	_			
9.	Number of Days Lunch Is Served				
9. 10.	Number Days (0)	_	\$		
	Number Days (9) x Dollars Per Day (8)	=	Ф		
Dollars Lost For Year					

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FORM C.26. CHECKLIST OF COST CONTROLS FOR SCHOOL FOODSERVICE DIRECTORS

CHECKLIST

Instructions:

Check steps you now take as cost control measures and indicate the steps you plan to take in the future with dates for beginning the procedures.

		YES (1)	NO (2)	DATE TO BEGIN (3)
1.	Precost recipes and menus.			
2.	Postcost menus.			
3.	Carry less than 15 days of inventory.			
4.	Staff schools based on MPLH.			
5.	Increase productivity or MPLH each year.			
6.	Prepare monthly profit and loss statement for school district.			
7.	Prepare monthly profit and loss statements for each school.			
8.	Ensure that managers know how to reduce costs.			
9.	Examine ways to reduce food costs at each school.			
10.	Examine ways to reduce labor costs at each school.			
11.	Ensure that managers and staffs are involved in controlling costs.			
12.	Increase revenue by providing other services.			
13.	Ensure that managers understand the profit and loss statements.			
14.	Prepare a budget for the school district.			
15.	Use the budget as a cost control tool.			

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